



iSERIES  **CATALOGUE 2016**

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Technibel iSERIES



SHOTS ON iSERIES

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Real triple balls A/C

iSERIESTM is an inverter system composed by a full set of indoor and outdoor units which can be mixed together, ideal to realize multiple residential and commercial solutions, in a simple, intuitive and multifunctional way.

**ALL NEEDS
SINGLE SPLIT**
from 2 up to 16 kW

with DHW recovery



**MULTISPLIT UP TO
8 ROOMS**

with DHW recovery



**HEAT PUMP
AIR/WATER**

with DHW recovery



**HEAT PUMP
MIXED AIR/WATER
AND AIR/AIR**

with DHW recovery



**MINICHILLER
INVERTER**

with DHW recovery



**FOR ALL THE PACKAGE
& MINI VRF
APPLICATIONS**

with DHW recovery



iSERIES
SOMETHING
DIFFERENT
BUT ITALIAN





**MONO
DUAL
TRIAL
QUADRI
PENTA**

and much more...

WHY AN ORDINARY SPLIT FOR SUMMER IF YOU CAN HAVE ISERIES FOR HOT WATER TOO?



iSERIES ™

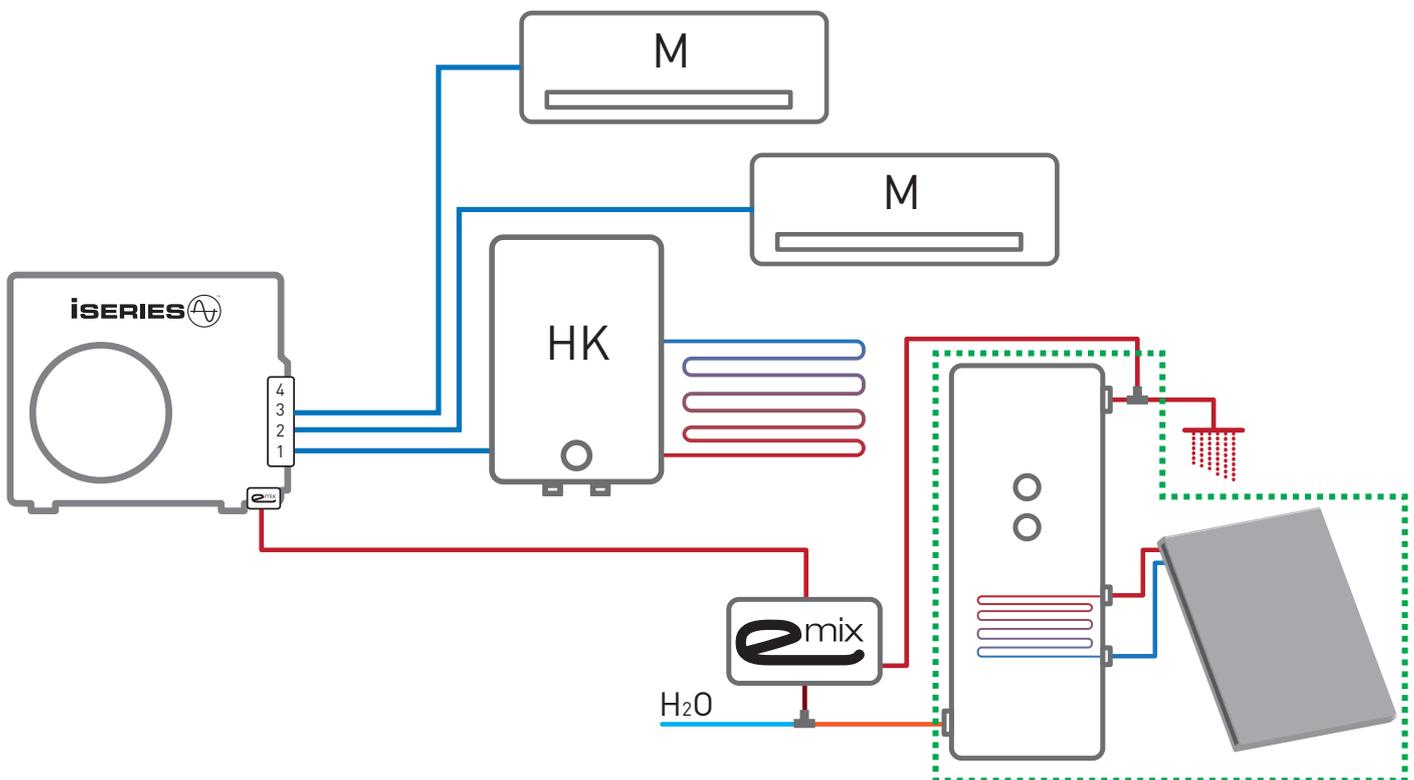
Cool that generates **heat**

iSeries is a multi-function air-conditioning system that, thanks to its innovative heat-recovery technology, can freely heat up water during the cooling cycle, without affecting the electricity consumption



DIRECT EXPANSION & HYDRONIC: A PERFECT MIX

Direct expansion or hydronic? Split or underfloor? With iSeries the choice is simple: both of them. iSeries is the unique multisplit that offers the capability, in a fast and simple way, to warming and cooling both with standard split units and underfloor or radiators. Two technologies, only one system.



For air conditioning of several rooms it is not always necessary to increase the number of indoor units installed. With an iSERIES ducted system is possible to reach up to 8 different rooms, without sacrificing comfort and simplicity of a classic multi-split.

2 MULTI FOR 1

UNDERFLOOR HEATING & COOLING? NO PROBLEM!

Today underfloor systems are now an ever more frequent choice, both for heating and for cooling. With iSeries, thanks to Hydrokit unit, low temperatures applications are fully available.

SDHV systems are much more than a simple ducted option. They are a real news in air ducted systems. SDHV bring several plus: small tubing for air distribution, 30% more dehumidification and small visual impact.

UNICO DUCTS YOUR AIR

WELCOME ARCHITECTS!

Elegant indoor units with interchangeable wood panels, for low visual impact installation... There are many ideas with iSeries for anyone involved in interior design or air conditioning systems with a focus on aesthetic finishing.

HEAT PUMP? OK!

The heart of iSeries is the heat pump technology, which is a source of renewable energy. Not only as direct expansion mono/multi indoor units but also as hydronic system, an iSeries system uses the energy in the outdoor air to heating and to produce hot water.

MINICHILLER INVERTER

The iSeries flexibility has so many advantages: one of them is the possibility to use it as minichiller split inverter. Just install an outdoor unit, an hydrokit and you're done. The most advanced inverter technology applied to hydronic solutions.

YOU CAN HAVE IT HYBRID

In some cases with heat pump a gas heater back up is required. This can happen in very cold areas or where there is not a large supply of electricity. In this case, by installing an iSeries system with hydrokit you can integrate a boiler of any model or brand as an energy source support.

FOR THOSE WHO PREFER RADIATORS

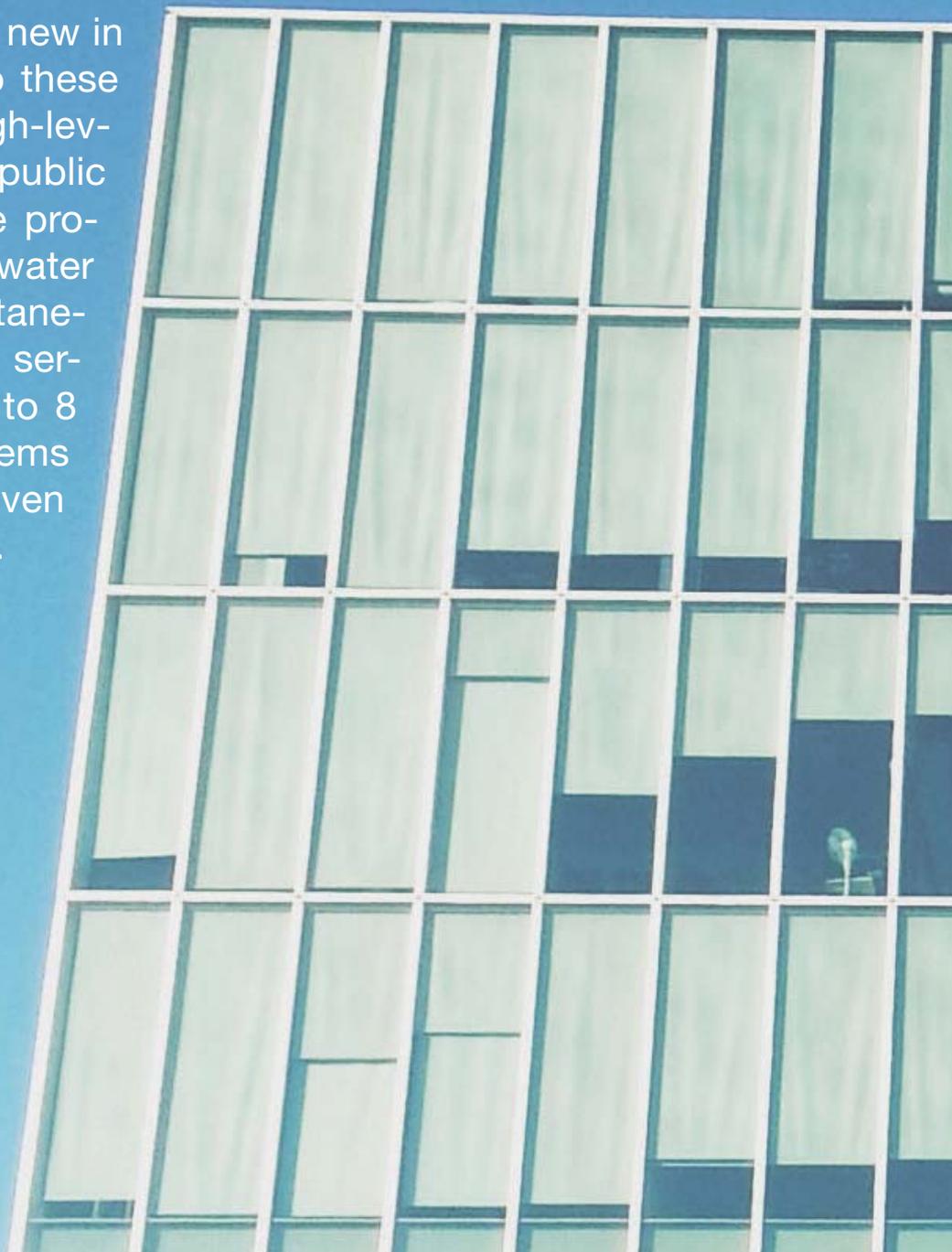
Radiators are still very popular, especially in traditional systems. Today the most common models are made of steel or aluminum that allow to operate with lower water temperatures compared to older cast iron terminals. iSeries, thanks to hydrokit unit can also be connected to radiators systems, offering a solution that combines tradition and innovation.

FAN COILS AS WELL

Fan coils are still one of the most widespread terminal units, especially in commercial or service applications. In this installations often it is required a generator replacement maintaining existing terminals. iSeries and hydrokit can satisfy this need, creating a minichiller or a split heat pump full inverter ideal for such applications.

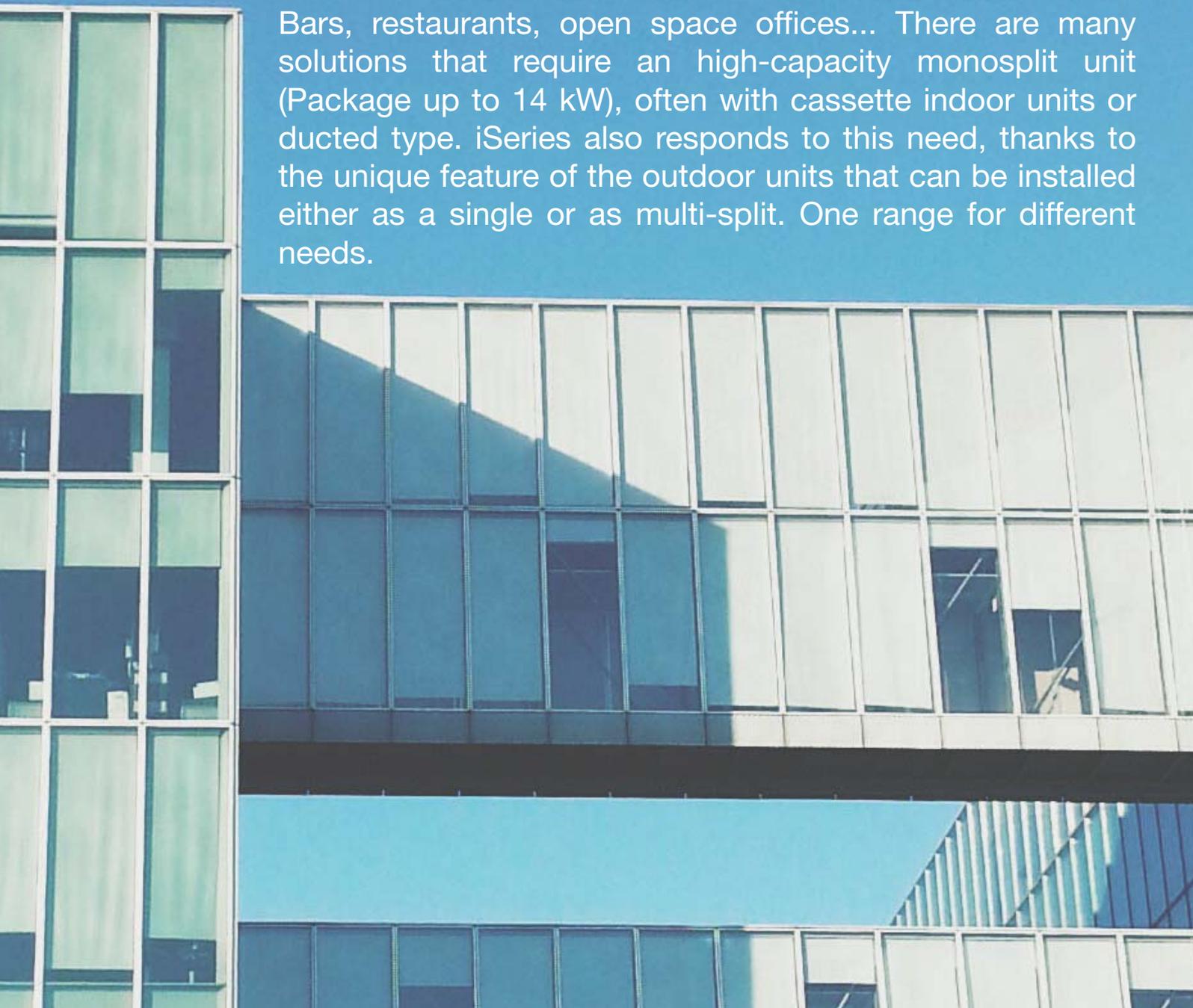
INSTEAD OF A MINI VRF UP TO 8 ROOMS

iSeries offers something new in the world of mini vrf. To these solutions often used in high-level residential or offices / public places, iSeries adds the production of domestic hot water with heat recovery simultaneously to air conditioning service to cover needs up to 8 rooms, with ducted systems that allow to climate even bathrooms and kitchens.



ALSO PACKAGE

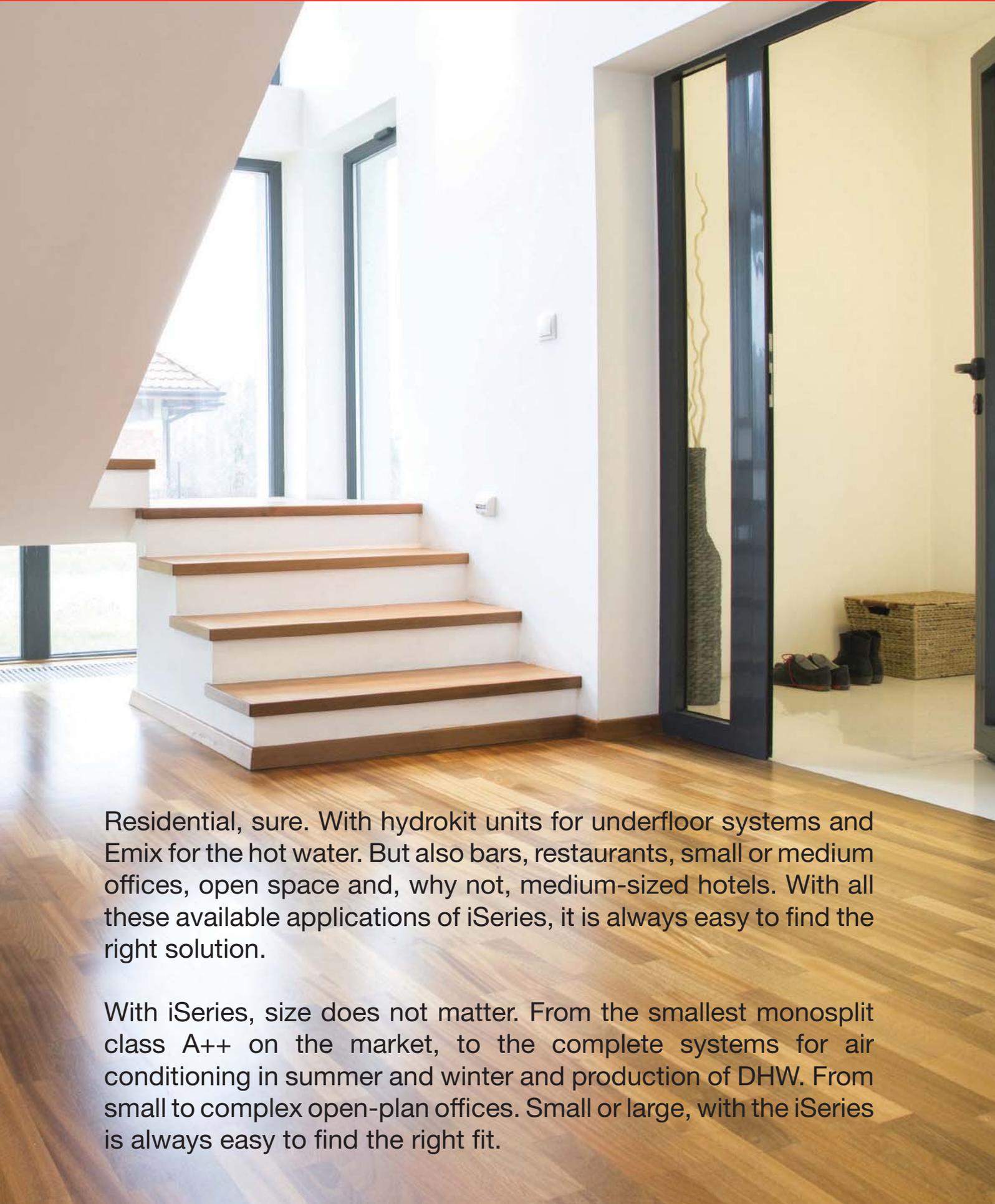
Bars, restaurants, open space offices... There are many solutions that require an high-capacity monosplit unit (Package up to 14 kW), often with cassette indoor units or ducted type. iSeries also responds to this need, thanks to the unique feature of the outdoor units that can be installed either as a single or as multi-split. One range for different needs.



HOME, OFFICE... FROM SMALL



TO BIG! ALWAYS iSERIES



Residential, sure. With hydrokit units for underfloor systems and Emix for the hot water. But also bars, restaurants, small or medium offices, open space and, why not, medium-sized hotels. With all these available applications of iSeries, it is always easy to find the right solution.

With iSeries, size does not matter. From the smallest monosplit class A++ on the market, to the complete systems for air conditioning in summer and winter and production of DHW. From small to complex open-plan offices. Small or large, with the iSeries is always easy to find the right fit.

PATENTED
hot water for free during cooling

EP 2 369 257 B1

GAS
BYE BYE

Heat pump and solar, that's a perfect combination. More and more users choose to abandon gas, opting for 100% electric utilities. The unique multiservice iSeries fits perfectly with this eco-friendly choice.

A A A A A

**WHAT A
CLASS!**

**THE MORE YOU USE IT
THE MORE YOU SAVE**

Everyone likes to save money, specially when it's so easy. Use a multi-split iSeries to cool the rooms in summer and produce hot water for free is so simple that you want to do it more often. iSeries changes the rules: the more you use, the less you pay.

6in1



**SILENCE
QUITE
NOTHING
TO HEAR**



iFEEL
THE TEMPERATURE
YOU WANT



**HUMIDITY
UNDER
CONTROL**



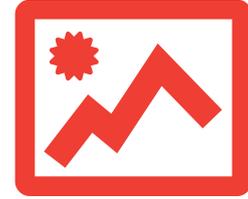
**WIRED OR
INFRARED**



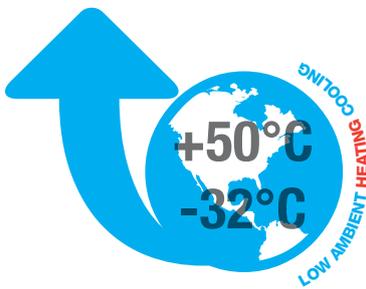
WI-FI INTERNET SMS



HYDRONIC CONTROL INCLUDED



FROM TROPICS TO THE NORTH



DC INVERTER MONOPHASE TRIPHASES

50/60 Hz

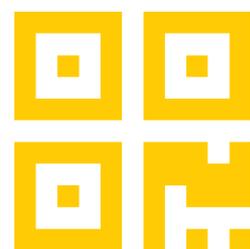


SVPWM180°

ONE OUTDOOR FOR MANY USES



MODULAR AS YOU WANT



**ALL IN
ONE**

**ALL
INCLUDED**

**INVENTED
DESIGNED
MADE
IN ITALY**

**EASY
TO USE**

**EASY TO
INSTALL**

**INTERNATIONAL
SUPPORT**

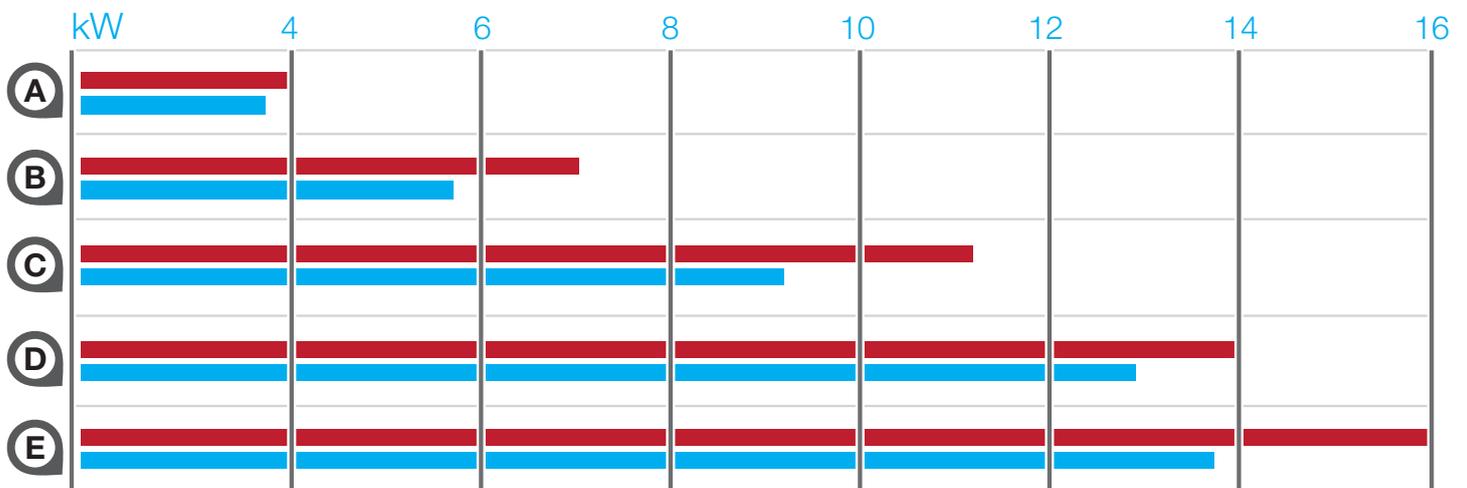
RAC, PAC, VRF...

7/9/12/18/24/36...

FORGET IT!



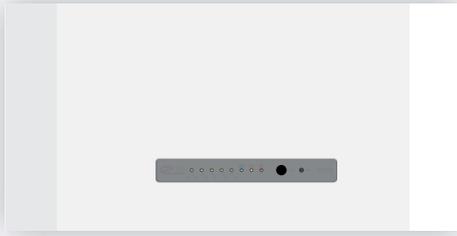
JUST 5 SIZES



DIRECT EXPANSION INDOOR UNITS

	NAME	TYPE	MAIN FEATURES	SIZE
	MF	WALL	       	(A)
	MP	WALL	       	(A) (B)
	MP 13	WALL	       	(A) (B)
	K2	FLOOR	       	(A) (B)
	KP	FLOOR CEILING	       	(A) (B)
	CA	CASSETTE	       	(A) (B) (C) (D)
	SD	SLIM DUCTED	       	(A) (B)
	DS	DUCTED	       	(B) (C)
	SDHV	SMALL DUCT HIGH VELOCITY	       	(B) (C) (D)

DHW INDOOR UNITS



EMIX

ERP CLASS A - PROFILE XL



UNIT FOR DOMESTIC HOT WATER PRODUCTION TO BE MATCHED WITH AN EXTERNAL TANK



Optimized for tank from 100 up to 300 liters

Works with every electric boiler with or without mixing valve

Double wall exchanger for the maximum safety with drinking water

Dynamic management of anti-legionella cycle

Up to 80°C from the thermodynamic cycle

Dynamic management of the superheating

Heating recovery and energy storage during the cooling

Hot water for free when the system runs in cooling mode

Can manage solar panels, electric heating elements, gas heater and gas boiler as a back-up

For application with AEI1G140EMX use 1/2 inch R410A version

EMIX TANK 300/220

DHW UNIT WITH BUILT-IN TANK 300 OR 220 LT. STAINLESS STEEL 404 OR ENAMELLED



Double wall exchanger for the maximum safety with drinking water

Three back-up electric heaters embedded, manually or automatically managed

Integrated solar coil

Integrated mixing valve

White cabinet

Dynamic management of anti-legionella cycle

Up to 80°C from the thermodynamic cycle

Dynamic management of the superheating

Heating recovery and energy storage during the cooling

Hot water for free when the system run in cooling mode

Can manage solar panels, electric heating elements, gas heater and gas boiler as a back-up

For application with AEI1G140EMX use 1/2 inch R410A version



ERP CLASS A - PROFILE XL



AIR TO WATER INDOOR UNITS

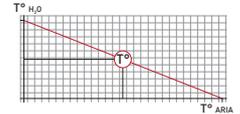
HYDROKIT UNIT FOR HEAT PUMP OR MINI CHILLER



ERP A++ (35°C)
A+ (55°C)



- Underfloor Heating
- Radiators Heating
- Fan coil Heating
- Underfloor Cooling
- Fan Coil Cooling
- To be mixed with Direct Expansion indoor units
- Can management hybrid system with gas heater
- Integrated expansion tank
- Double safety valve
- Integrated electric back-up module



INTEGRATED CLIMATIC CONTROL

MPW



- Wall installation
- Compact
- White satin finish
- 4 sizes up to more than 5 kW of heating capacity (see technical sheets)
- To be combined with Hydrokit for all hydronic heating/cooling two pipes systems
- IR remote control or third party wired controllers

KPSW



- Floor/Ceiling installation
- Slim chassis only 19cm of depth
- 3 sizes up to more than 5 kW of heating capacity (see technical sheets)
- To be combined with Hydrokit for all hydronic heating/cooling two pipes systems
- IR remote control or third party wired controllers

CAWI



- Mini cassette 60x60
- Cassette 80x80 & 110x80
- Ideal for ceilings of shops, public spaces, offices ...
- 6 sizes up to 11 kW of heating capacity (see technical sheets)
- DC Inverter motors
- Wired or wireless remote control included
- ModBus & 0/10 Volt compatibility
- To be combined with Hydrokit for all hydronic heating/cooling two pipes systems

MANY WAYS TO MANAGE YOUR iSERIES

All air-conditioner operating parameters can be controlled from the remote control: operating modes (auto or cooling only, heat pump only, dehumidification only, fan only), 1h and 24h timer, setpoint temperature, room temperature reading, TiO₂ and electronic filter activation (where fitted), fan speed, flap oscillation for optimum air distribution in the room and economy or night functions. Many operations can be set automatically or managed when needed, including the deactivation of the LED indicators for those that prefer complete darkness at night.

Indoor set point from 10° up to 32° C

both in cooling and heat pump modes



"EASY Mode"

The new layout lets you simply and quickly choose the start up and the two operating modes, cooling and heating

WIRED Mode

The remote control may also be used as a wired command by simply removing the protection lid and connecting the communication cable to the indoor unit.

P.S. Contact your sales representative or check our website to have the updated list of compatibility between indoor units and wired support

THIS IS NOT A SIMPLE REMOTE CONTROL BUT AN INFRARED OR WIRED SYSTEM CONTROL WITH SEVERAL SPECIAL FUNCTION, PROVIDED WITH ALL THE UNITS

- Wide range of operation. The presence of a dual infrared transmitter ensures a very wide range of operation: just place the remote control where you like for "made-to-measure" comfort in that area.
- Built-in temperature sensor for iFeel operations.
- Wide display with graphic symbols and alphanumeric indicators.

• Doppio trasmettitore



"iFeel" Function

a comparative function that ensures optimum temperature settings based on the values read at the remote control sensor, the sensor in the indoor unit and the resulting ambient temperature stratification conditions, which are always different from one room to another.

"iFlap" Function

The air flow can be released into the room in an "intelligent" way based on whether the unit is set to heating or cooling mode, thanks to a special system that controls the oscillation of the horizontal.

"Hi Power" Function (turbo no limits)

when maximum power is required straight away.

"ECO" Function

Unlike the "Hi power" function, for those who want instant maximum power, this function may be activated to optimise the operation of the outdoor units and the ventilation by reducing consumption and noise, exploiting all the modulation capacities of the inverter units.

Multi address

The remote control can be set to control four different units in an open space for unified control, or customised according to temperature, timer, operating mode, and all other functions.

One for all



One to One



"Quite Night" Function

Turn Off Led display on the indoor units

"RH% threshold" Function

Set the RH% value during Humidex and advanced dry mode

Wall mounted support

AHU SDHV CONTROL BOX



Air flow modulation

This control system brings a brand new feature for ducted indoor units: automatic control of air flow rate, according to indoor temperature set point. Why is this feature so important? Because, in this way, the amount of air flow is always adjusted following the temperature difference between indoor spaces and setpoint. The result of this type of regulation is a very high level of comfort both in cooling and in heating operation.

Easy installation

Control box unit has three main components: main metal box, IR receiver and IR wireless controller. Main unit is composed by electronic boards with BUS and power line wiring connections, inside a metal box. This box has to be fixed with screws on ducted indoor unit; its position can be choose according to available space (lateral side or upper side). Installation is always easy and comfortable. There are some input contacts on main electronic boards, such as: remote on/off contact, optional drain pump and a flow switch used to turn off the unit in case condensate overflow.

Wireless control system magement

Infrared receiver is connected with main electronic board with a 10 meters cable. The receiver is normally wall mounted. Its function is to transmit the signals coming from wireless controller to electronic control system. There are three leds on it, for stand by or operation status and for timer.

Wireless controller coming with Control Box is the same of any other iSeries indoor unit. In this case, it works like an indoor thermostat which will communicate (trough infrared receiver) the indoor temperature to main control board. In this way, thanks to advanced regulation control system, air flow rate will be modulated matching indoor temperature and setpoint. iFeel function is very useful in this case. This option compares air temperature value read by wireless controller and return air one. Normally, in a ducted application the controller will be placed far from return air point. iFeel function, providing a better analysis of temperature trend, will help control system calculating the right amount of air flow for indoor rooms.

AQUASET: THE HYDROKIT INTEGRATED CLIMATIC CONTROL

Heat Pump with or without DHW

Mini Chiller split with or without DHW

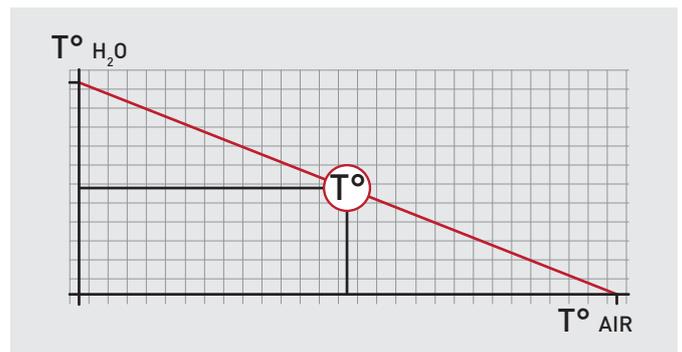
Mixed applications hydronic/direct expansion

Single or Multi zones

For underfloor, radiators and fan coils



Outdoor unit sensor is used by software in order to calculate water setpoint according to outdoor conditions.



Aquaset calculates outlet water temperature following outdoor temperature variations and indoor rooms thermal loads.

Smart setup

During commissioning of Hydrokit unit it is possible to set hydronic application type (underfloor, fancoils, etc...) in order to optimize performance and operation. Other parameters can be set, for example outdoor air threshold for heat pump operation. This value can be choose according to climate conditions (milder or colder).

Gas or electric backup

Aquaset can manage back up heating source, too. In this case, back up is provided by electric heaters on Hydrokit unit. These elements are automatically managed by software with energy saving focus: they will be used only if strictly necessary. Moreover, there are some parameters to be set in order to modify electric heaters operation.

Digital chrono thermostat

end users can program on/off scheduling during 24 hours a day, choosing desired temperature setpoint.

TOUCH SYSTEM CONTROLLER, WI-FI & INTERNET



TC43 and WB43 are two system controllers able to manage iSeries air conditioning, heating and DHW services (up to 4 systems per controller) using a web interface.

WB43 is designed to be used with a web browser on PC, MAC, iPad, iPhone, Android phones (Explorer, Chrome, Safari, Firefox are supported); TC43 offers the same service but it's also equipped with a 5" capacitive touch screen. For this reason it's, actually, a stand alone controller and no other device is strictly required.

Both WB43 and TC43 are able to manage DHCP protocol, so they can be used with dynamic IP address but also with static IP address (very common in VPN). They are connected to iSeries system with serial RS485 (4 serial ports for each controller) and to local net with Ethernet 10/100 on RJ45.

Thanks to a router on the local net and to controller's compatibility with DynDNS protocol and Tunneling services, you can have full remote access to iSeries without using static IP.

Every device using a web browser connected to local net, via Ethernet or via WiFi, can manage iSeries through TC43 and WB43. Both controllers can give access to operational parameters of indoor units (temperature set point, ventilation, cooling/heating mode, etc...) but also to supervision, maintenance, diagnostic, users' profile services.

TC43 and WB43 are very easy to install, you just have to connect them to iSeries bus and to a 12 VDC power.

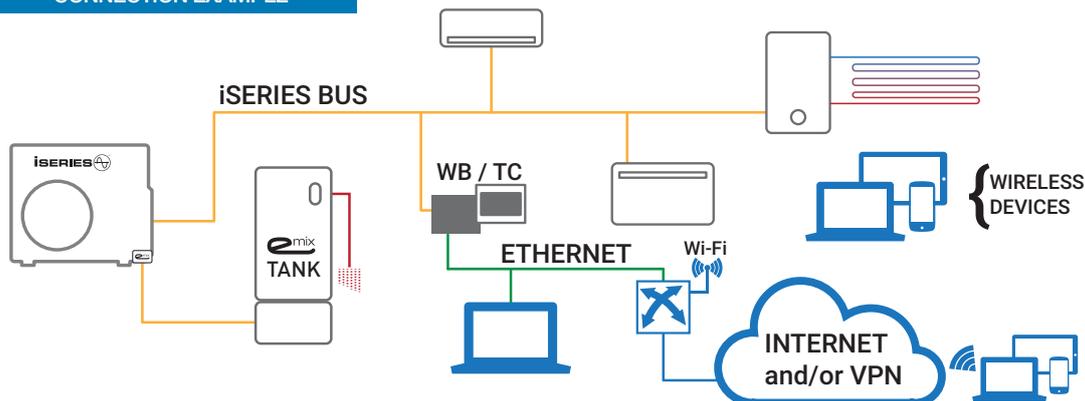
TC43 - WEB GATEWAY TOUCH SCREEN



WB43 - WEB GATEWAY



CONNECTION EXAMPLE



*example layout, please check datasheets of the controllers during pre-sales.

ISERIES IS OPEN SYSTEM

iSeries indoor units equipped with remote control, can be managed also by the Air PATrol APP, available for iPhone and Android. After the connection between the Air Patrol controller and the unit, you can set the temperature, fan speed and many others parameters using your smartphone via WiFi, from remote through Air Patrol CLOUD site or with a simple SMS

www.airpatrol.eu

AirPatrol



With home automation kit, you can connect advanced chronothermostat or domotic systems to program the indoor units operation, emix included. In this way you can improve the energy efficiency managing the system according to the real presence of people inside the rooms.

please contact argoclima pre-sale

Thanks to the international EIA/TIA RS485 standard and communication bus protocol extended down even to simple mono split, third party companies can develop complex projects of thermoregulation, interfacing supervisor system control to the native iSeries protocol and, for some units, using Modbus.

please contact argoclima pre-sale

RS485



ISERIES OUTDOOR UNITS

Take the heat from the air,
multiply it and give it back to the air and water
with extreme simplicity from -32°C up to $+50^{\circ}\text{C}$



Twin-Rotary balanced compressors, compact, high efficiency, quite, with wide envelope range and sinusoidal inverter permanent magnet motors made by rare raw materials

Electronic with flash memory for diagnostic and tele control, all Italian actuators, firmware and software for a pure sinusoidal sensorless 180° inverter solution and thermoregulation with a $1/16^{\circ}$ precision

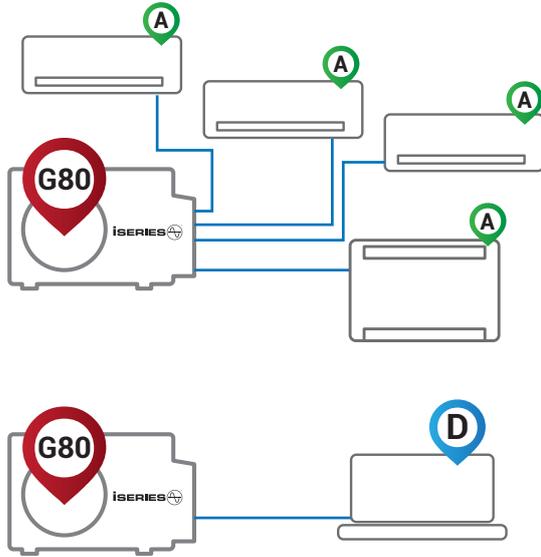


Copper, Aluminium and very high quality components, actuated and always ready to grant perfect operation for the entire system. Fully assembled in a metal case with 25 years of resistance in salt spray .



ISERIES VS THE OTHERS

SAME OUTDOOR FOR MONO AND MULTI



The same outdoor and indoor units can be used for residential and commercial applications. Different product lines no longer exist. A solution never seen before.

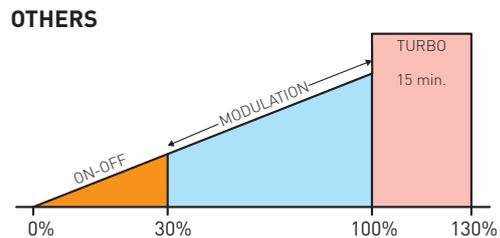
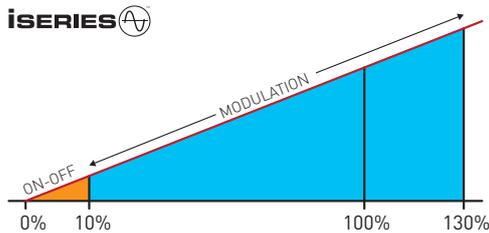
All the outdoor units of the iSeries range may be used in both mono-split (one indoor unit connected with an outdoor unit according to the selection tables) and multi-split configuration (several indoor units connected to an outdoor unit according to the selection tables) without any modification and/or without any special setting required.

Simply, the system adapts to the configuration automatically. This characteristic makes the iSeries unique in the market. As a matter of fact, all brands of air-conditioning systems propose the same indoor units for both mono-split and multi-split configurations (a feature which our units also have).

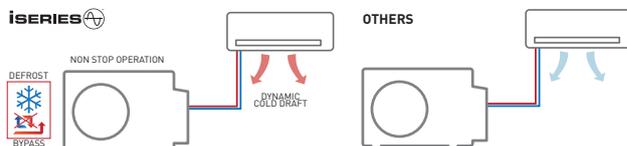
EXTENDED OPERATING RANGE



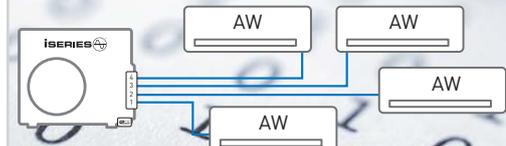
WIDER MODULATION



INTELLIGENT DEFROST



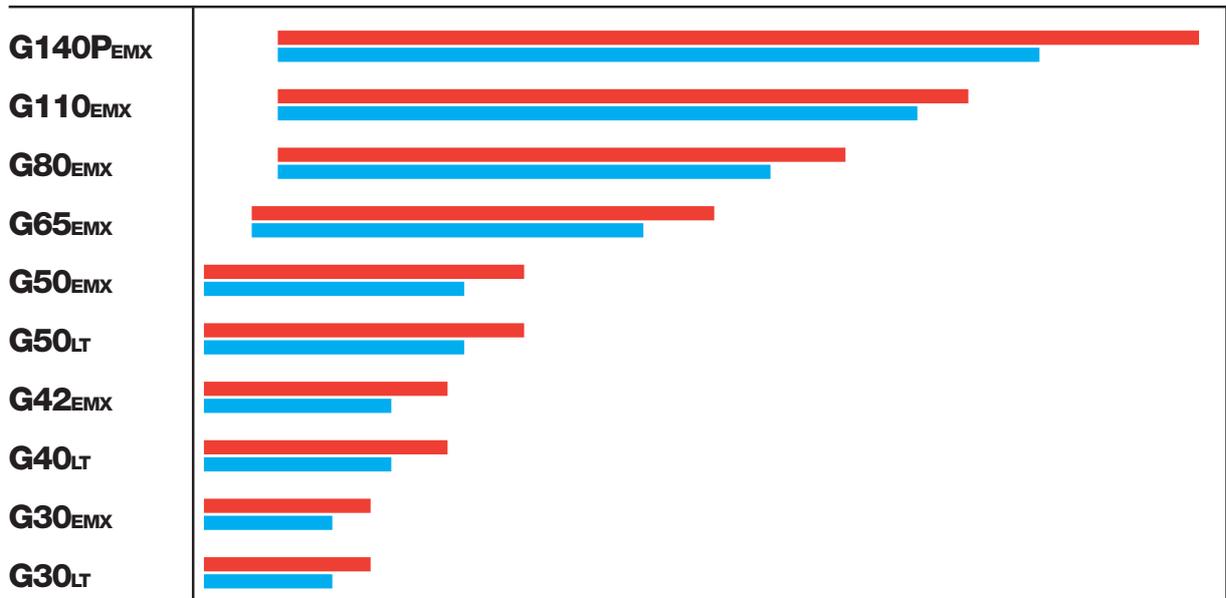
AUTOMATIC ADDRESS



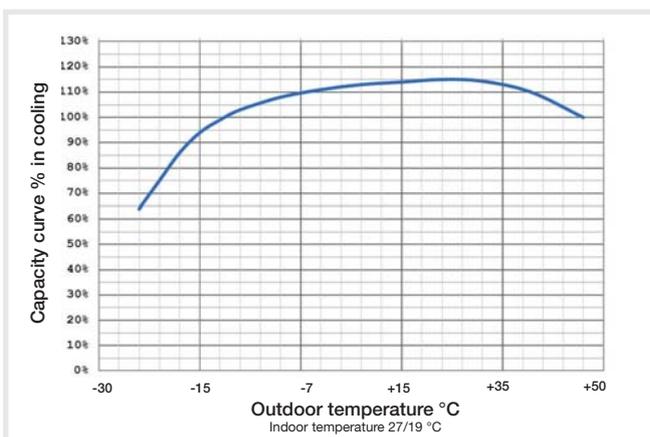
ISERIES OUTDOOR UNITS LINE UP



kW 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16



+35°C/+7°C Outdoor Condition



iSeries Low Ambient for computer room...

iSeries can be used in Low Ambient application, i.e. the ability to cool indoor environments even when the outside temperatures are unusual for air conditioning.

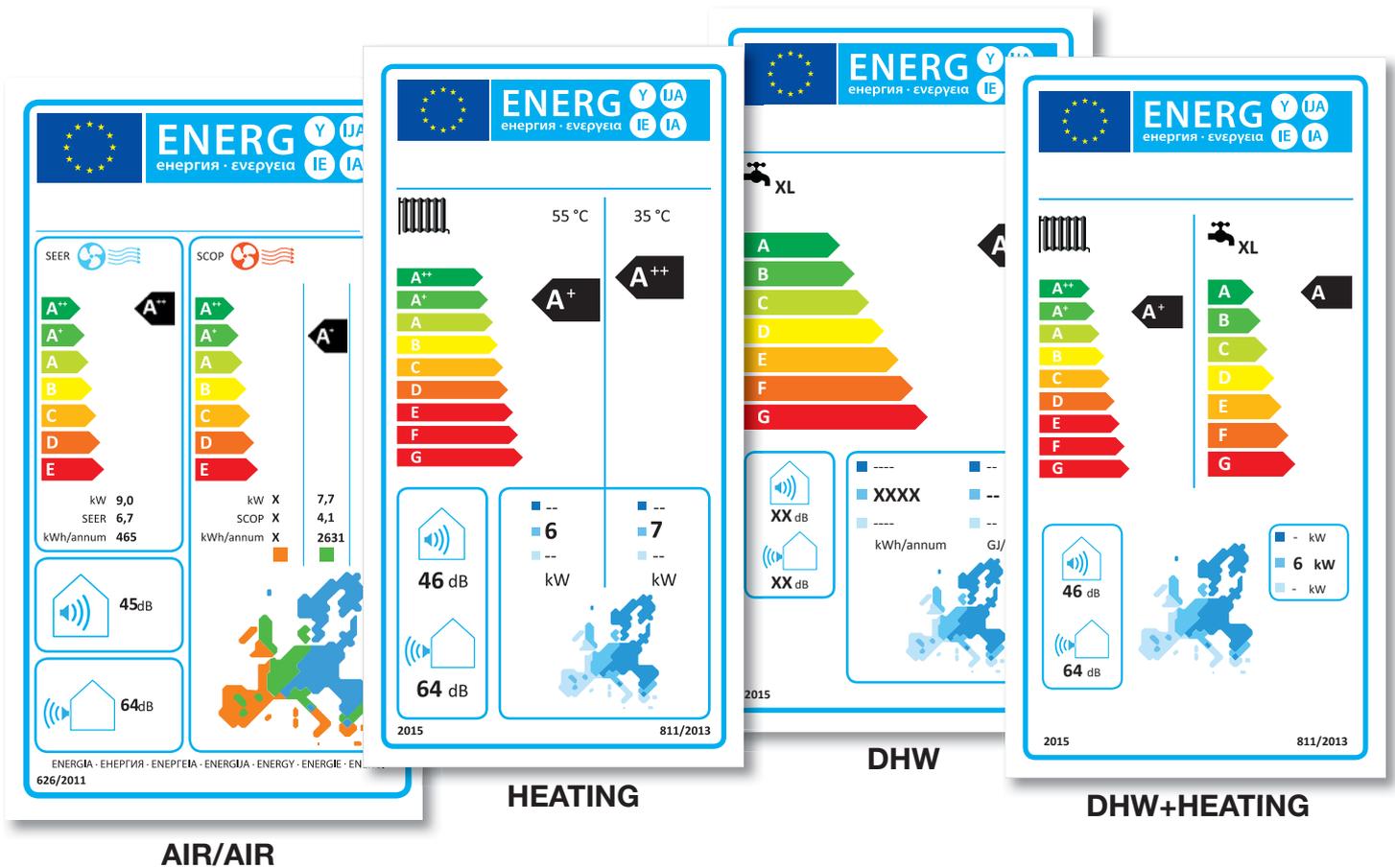
iSeries support also Low Ambient Indoor and this allows cooling operation with indoor temperatures down to 10 °C.

The diagram on the left shows a curve generally related to all iSeries outdoor units in low ambient applications.

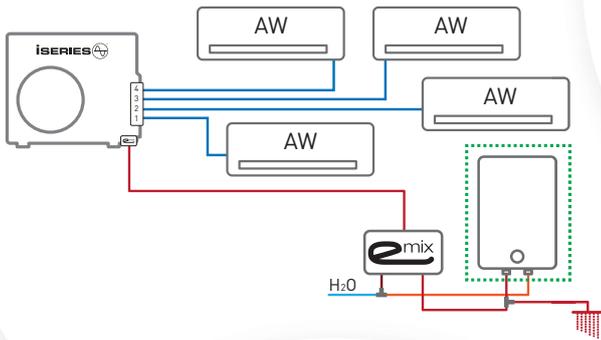
In specific installations where very precise indoor/outdoor temperature relations are required please contact Argoclima pre-sales.

APPLICATIONS AND ENERGY CLASS

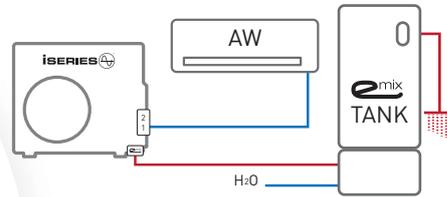
G140P_{EMX}	●	5	●	●	A++ A+	A++ A+	A++ A+	A XL
G110_{EMX}	●	4	●	●	A++ A+	A++ A+	A++ A+	A XL
G80_{EMX}	●	4	●	●	A++ A+	A++ A+	A++ A+	A XL
G65_{EMX}	●	3	●	●	A++ A+	A++ A+	A++ A+	A XL
G50_{EMX}	●	2	●	●	A++ A+	A++ A+	A++ A+	A XL
G50_{LT}	●		●		A++ A+			
G42_{EMX}	●	2	●		A++ A+			A XL
G40_{LT}	●		●		A++ A+			
G30_{EMX}	●		●		A++ A+			A XL
G30_{LT}	●		●		A++ A			



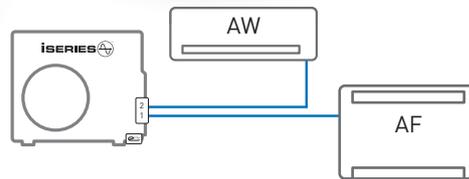
WHAT YOU CAN DO WITH ISERIES



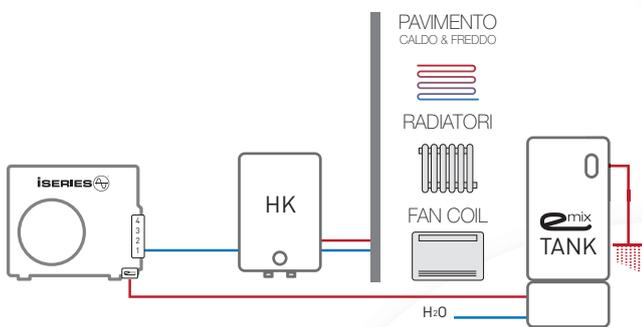
A2A MULTISPLIT + ACS



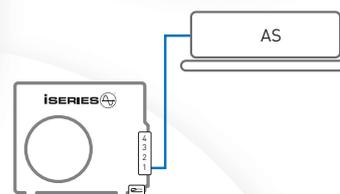
A2A MONOSPLIT + ACS



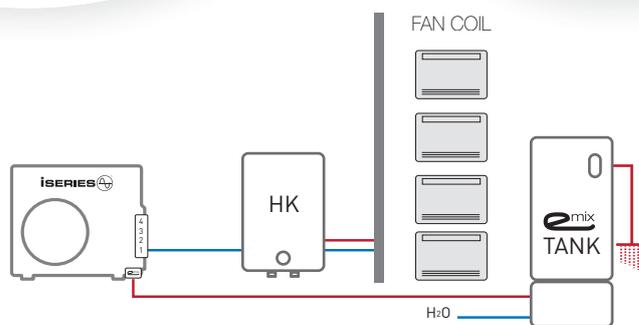
A2A MULTISPLIT



A2W POMPA di CALORE + ACS

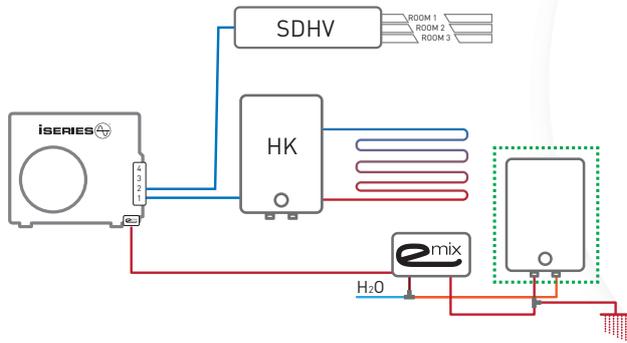


A2A PACKAGE

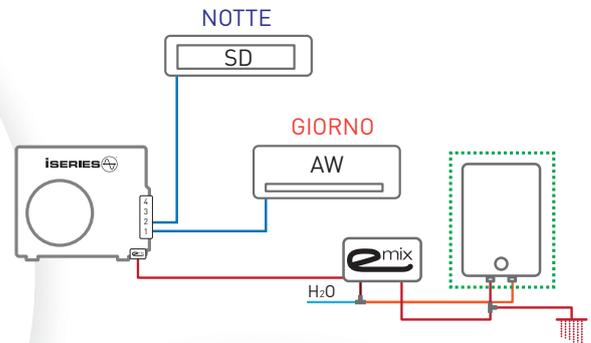


MINI CHILLER INVERTER

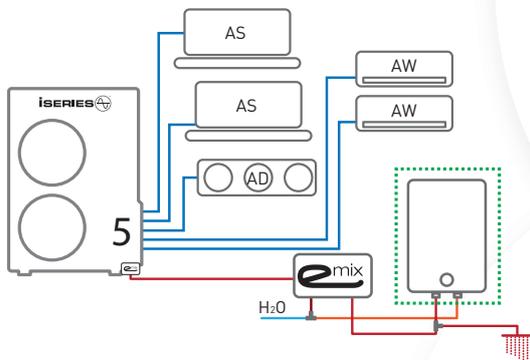
WHAT YOU CAN DO WITH ISERIES



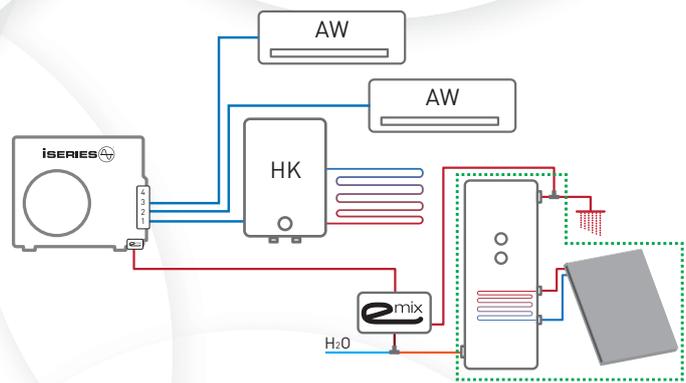
A2A + A2W + ACS



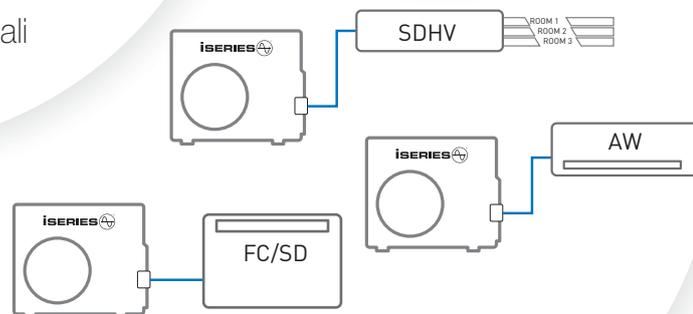
A2A MULTIZONA + ACS



A2A + ACS
Applicazioni Commerciali



A2A + A2W + ACS + SOLARE
Sistema Integrato



LOW AMBIENT
Cooling Computer Room

DIRECT EXPANSION PLUS

- high speed and efficiency in cooling
- great dehumidification
- heating faster cold rooms
- easy to install
- almost zero maintenance

HYDRONIC APPLICATION PLUS

- underfloor natural convection heating
- radiators natural convection heating
- longer distances between outdoor unit and terminals
- almost zero maintenance

ISERIES MIX APPLICATION PLUS

- the mixed iSeries solution combines all the advantages of direct expansion and hydronic listed above, adding the following plus:
- you don't have to buy a dehumidifier when you use underfloor systems for cooling
- you can use hydronic during winter and direct expansion in summer
- you can have some zones with natural convection and others with mechanical ventilation
- with sdhv and hydronic you can cool every type of room, also bathrooms and kitchens
- you can add air conditioning and recover your old radiators system
- you can always have hot water at the same time your system is running in cold or heat mode
- you can combine the air conditioning with thermo-solar panel
- the maintenance costs are reduce almost to zero
- you can supply your system with a photovoltaic panel to use always renewable energy

TECHNIBEL

DIRECT EXPANSION INDOOR UNITS
DHW INDOOR UNITS
HYDRONIC INDOOR UNITS
OUTDOOR UNITS

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Temperatura bivalente					
Temperatura limite di esercizio					
Riscaldamento (medio)					
Riscaldamento (più caldo)					
Riscaldamento (più freddo)					
Efficienza delle elicita					
Raffreddamento					
Riscaldamento					
Coefficiente di degradazione in riscaldamento					
Consumo energetico stagionale					
Raffreddamento					
Riscaldamento (medio)(-10°C)					
Riscaldamento (più caldo)					
Riscaldamento (più freddo)					
Altri eler					



Quite and elegant as a piece of furniture

MF

Model:

MFA
P1AW
P2AW (front panel)
P3AW

MF, a unique wall-mounted indoor unit: another step towards the integration with furnishing accessories. Consisting of a unit body completely made of precious paintable ABS and three types of panel, which may be chosen to match the characteristics of the environment of installation.

MF White



MF Oak



MF Wengè



Dimensions: HxLxD 305x895x195/110 mm
Weight: 10.5 kg

5 in 1

Air Conditioner
Heat pump
Dehumidifier
Purifier
Fan



INFRARED+WIRE
included wired option



21
dB(A)

It consumes as an LED lamp and save over 70% than traditional units



MF

		MFIA
Air flow rate I.U. (el.-l.-m.-h.)	m³/h	250-410-480-600
Dehumidification	l/h	1,5
Fan speed	N°	Auto + 3 remote control settings
Sound pressure I.U. (el.-l.-m.-h.)	dB(A)	21-29-36-39
Electrical power supply	V/Ph/Hz	230/1/50
Power input max	kW	0,012
Type of motor	-	DC Motor Inverter
Liquid pipe diameter	mm (")	6,35(1/4")
Gas pipe diameter	mm (")	9,52(3/8")
Net weight I.U.	kg	10,5
Net dimensions I.U. (H./W./D.D of recess-fitted I.U.)	mm	305x895x195/110



WHITE

OAK

WENGÈ

LOCK + MAGNET

The two Oak and Wenge panels are made of oil-phenolic plywood, while the white panel is made of water repellent wood fiber to be totally immune to deformation and formation of condensation.



MF is also fitted with a panel with the Lock & Magnet quick coupling system which carries out all the maintenance and filter cleaning operations of the panel, in the simplest and safest manner possible. Just secure the panel to the upper bushes and the magnets will make the panel more solid.

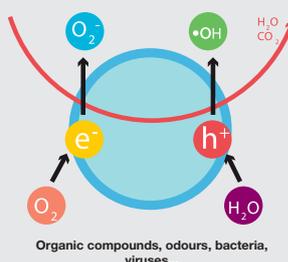
MF is designed to provide high energy efficiency and has one very important feature: it can be built-in using the dedicated wall mounting kit.

MF is also easy to install, thanks to the possibility of connecting the refrigerant pipes either to horizontal compartment or to the right side; the bilateral condensation discharge pipe and the possibility of fitting the unit at below two metres in height (thanks to the protection grille), complete the flexibility of this high quality unit.



Semi built-in installation

TiO₂ AIR PURIFIER



MF is equipped with an active photocatalytic filter that is able to significantly reduce the bacterial load in the environment thanks to the titanium dioxide oxidation process activated by completely concealed special UV LEDs that are fully compliant with EU standards. This filter uses the oxidising power of Titanium Dioxide (TiO₂) to destroy bacteria and inhibit viruses. It also effectively reduces dust and dirt particles and helps to prevent unpleasant odours.



Sophisticated and discreet even at maximum power

MP

5 in 1

Air Conditioner
Heat pump
Dehumidifier
Purifier
Fan

Model:

MPAFIA

Model:

MPA9FIB

Elegant and discreet, available in sizes A and B, an indoor unit to suit all tastes, suitable for all settings both in terms of design and heat output.

A



Dimensions: HxLxD 270x805x215 mm
Weight: 8 kg

B



Dimensions: HxLxD 285x995x240 mm
Weight: 12 kg



INFRARED+WIRE
included wired option

It consumes as a LED lamp and save over 70% than traditional units



MP

		MPA9FIA	MPA9FIB
Air flow rate I.U. (el.-l.-m.-h.)	m³/h	390-430-450-470	410-580-710-880
Dehumidification	l/h	1,5	2,0
Fan speed	n°	Auto + 3 remote control settings	Auto + 3 remote control settings
Sound pressure I.U. (el.-l.-m.-h.)	dB(A)	23-29-36-39	29-35-43-47
Electrical power supply	V/Ph/Hz	230/1/50	230/1/50
Power input max	kW	0,012	0,019
Type of motor	-	DC Motor Inverter	DC Motor Inverter
Liquid pipe diameter	mm (")	6,35(1/4")	6,35(1/4")
Gas pipe diameter	mm (")	9,52(3/8")	12,7(1/2")
Net weight I.U.	kg	8	12
Net dimensions I.U. (H./W./D.)	mm	270x805x215	285x995x240

Perfect white satin finishing

The casing for model **MP** is treated using a photo engraving technique to obtain a satin effect on the plastic, this is done during the injection stage and no further treatments are applied. You can see the quality of the material and manufacturing process used with the naked eye, this sets the **MP** unit apart from other white wall-mounted indoor units.



LED are boring, turn them off



Can be installed from 1.7 m



MP are ideals in rooms with a very low ceiling, thanks to the special anti-intrusion grids.

Active charcoal filters, always clean air

The optional activated charcoal filter is comprised of a layer of synthetic material folded to increase the filtering surface area and treated with a professional anti-bacterial solution, combined with an activated charcoal mesh. Activated charcoal is a material mainly made up of carbon in the form of graphite micro crystals treated in such a way as to create a porous structure with a vast internal

surface area. When the forced air flow passes through the filter element, the charge of static energy allows the filter to trap even the smallest particles of pollutants and allergens, down to a size of 0.01 microns. The activated charcoal layer attracts and absorbs the organic molecules responsible for unpleasant odours, eliminating them completely.



Shiny white style appliance lovers

MP₁₃

Model:
MPAF13A
MPAF13B

MP13, a modern and elegant wall mounted indoor unit, equipped with a soft led and display interface and a design that can be easily integrated in any kind of residential and commercial environment.



Dimensions: HxLxD 289x845x209 mm
Weight: 10 kg



Dimensions: HxLxD 300x970x224 mm
Weight: 13,5 kg

5 in 1
Air Conditioner
Heat pump
Dehumidifier
Purifier
Fan



INFRARED

Effective, powerful and efficient



MP

		MPAF13A	MPAF13B
Air flow rate I.U. (el.-l.-m.-h.)	m³/h	330-460-540-660	520-610-720-800
Dehumidification	l/h	1,5	2,0
Fan speed	Nº	Auto + 3 remote control settings	Auto + 3 remote control settings
Sound pressure I.U. (el.-l.-m.-h.)	dB(A)	25-31-39-42	36-39-42-46
Electrical power supply	V/Ph/Hz	230/1/50	230/1/50
Power input max	kW	0,031	0,086
Type of motor	-	AC Motor Varispeed	AC Motor Varispeed
Liquid pipe diameter	mm (")	6,35(1/4")	6,35(1/4")
Gas pipe diameter	mm (")	9,52(3/8")	12,7(1/2")
Net weight I.U.	kg	10	13,5
Net dimensions I.U. (H./W./D.)	mm	289x845x209	300x970x224

GLOSSY

MP13 is made in a compact and efficient structure in high quality PS, finished in polished white, easy to be installed and equipped with a double condensate discharge (left or right). This unit is perfect for any kind of residential and commercial application, offering a high level of comfort in the whole range of operational temperatures.

QUIET FILTER

MP13 is available in the two standard A & B size of iSeries indoor units covering the typical applications of the high wall and offer an MMI interface very soft, composed by symbol/led and numerical display that, as iSeries tradition, could be disabled by remote control in order to have quite nights without light during the sleep type.

PLASMA FILTER

MP13 is equipped with a first level washable filter to protect the exchanger and with a monolithic electronic plasma filter that does not require any maintenance and it is managed by the remote control; the plasma filter is able to make oxidation of bacteria and many organic and inorganic pollution particulate.

Display & symbols

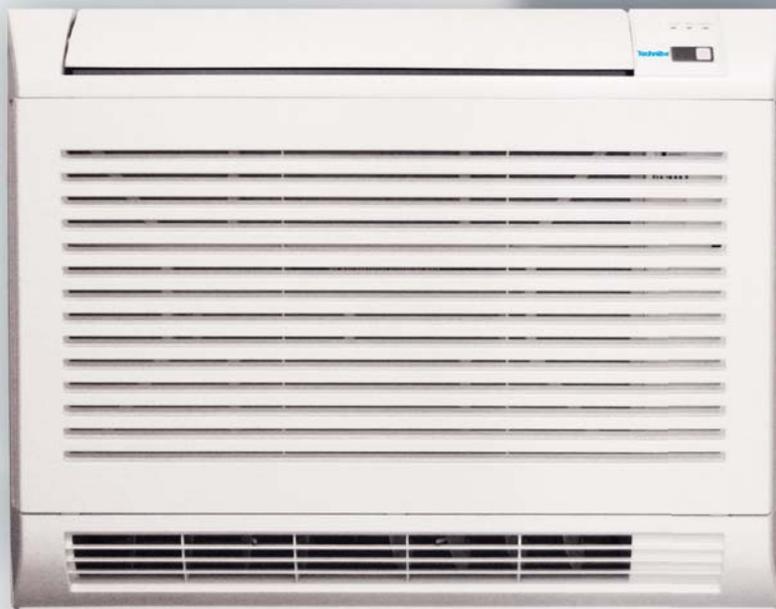


- LED indication
- Temperature display

Clear lines



- Left and right drain connection



Exceptional comfort, ideal in bedrooms

K2

Model:

K2FAFIA

K2FAFIB

A refined console for low wall installation, at just a few centimetres from the floor and with two-way air flow, up and down, for maximum comfort in summer and winter.



Dimensions: HxLxD 600x750x220 mm
Weight: 18 kg

5 in 1
Air Conditioner
Heat pump
Dehumidifier
Purifier
Fan



INFRARED+WIRE
included wired option

Humidity sensor

It consumes as a LED lamp and save over 70% than traditional units

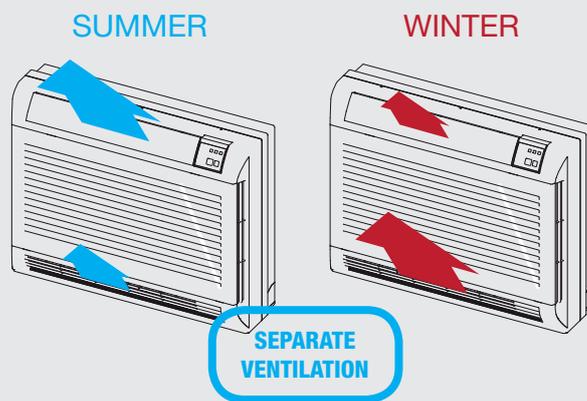


K2

		K2FAFIA	K2FAFIB
Air flow rate I.U. (el.-l.-m.-h.)	m³/h	450-500-590-700	615-665-760-830
Dehumidification	l/h	1,3	2,3
Fan speed	Nº	Auto + 3 remote control settings	Auto + 3 remote control settings
Sound pressure I.U. (el.-l.-m.-h.)	dB(A)	22/26/30/37	28/30/37/45
Electrical power supply	V/Ph/Hz	230/1/50	230/1/50
Power input max	kW	0,012	0,019
Type of motor	-	DC Motor Inverter	DC Motor Inverter
Liquid pipe diameter	mm (")	6,35(1/4")	6,35(1/4")
Gas pipe diameter	mm (")	9,52(3/8")	12,7(1/2")
Net weight I.U.	kg	18	18
Net dimensions I.U. (H./W./D.)	mm	600x750x220	600x750x220

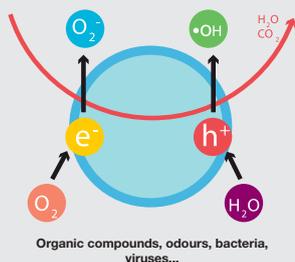


K2 is equipped with two DC motors fans managed by indoor unit control system. They can be activated in a differential mode to provide the best air distribution according to the operating cooling or heating mode.



K2 is made of a prized ABS and is well suited for installation under windows or mid-wall, occupying the smallest space possible. K2 is available in sizes A and B, whilst still maintaining the same structure and dimensions. It filters and purifies the air using a washable mesh filter and a titanium dioxide photocatalytic filter that can be activated via remote control. At 22 dB(A), the unit is extremely quiet thanks to its specially-designed structure and two tangential fans managed by inverter-controlled DC motors.

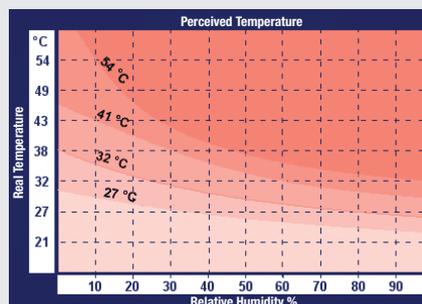
TiO₂ AIR PURIFIER



K2 is equipped with an active photocatalytic filter that is able to significantly reduce the bacterial load in the environment thanks to the titanium dioxide oxidation process activated by completely concealed special UV LEDs that are fully compliant with EU standards. This filter uses the oxidising power of Titanium Dioxide (TiO₂) to destroy bacteria and inhibit viruses. It also effectively reduces dust and dirt particles and helps to prevent unpleasant odours.

Humidex

K2 units are provided with a special humidity sensor. The humidity sensor signal is used by the logic, placing it in relation with the temperature measured by the room air and Humidex sensor, which measures the perception of the human body considering the combined effects of temperature and humidity. This function is available only in "auto heating mode" and "auto cooling mode".





The most versatile: floor or ceiling installation

KP

Model:
KPA8FIA
KPA9FIB

KP reversible unit can be installed on the floor or the ceiling

KP **A**
B



Dimensions HxLxD 680x900x190 mm
Weight: 23,5 kg



INFRARED+WIRE
included wired option

Humidity sensor

5 in 1

Air Conditioner
Heat pump
Dehumidifier
Purifier
Fan



Perfect integration in every room and easy maintenance



KP

		KPA8FIA	KPA9FIB
Air flow rate I.U. (el.-l.-m.-h.)	m³/h	310-390-430-520	450-510-610-720
Dehumidification	l/h	1,3	2,3
Fan speed	N°	Auto + 3 remote control settings	
Sound pressure I.U. (el.-l.-m.-h.)	dB(A)	24-26-30-37	35-40-46-49
Electrical power supply	V/Ph/Hz	230/1/50-60	230/1/50-60
Type of motor	-	DC Motor Inverter	DC Motor Inverter
Power input max	kW	0,037	0,075
Type of motor	A	0,17	0,33
Liquid pipe diameter	mm (")	6,35(1/4")	6,35(1/4")
Gas pipe diameter	mm (")	9,52(3/8")	12,7(1/2")
Net weight I.U.	kg	23,5	23,5
Net dimensions I.U. (H./W./D.)	mm	680x900x190	680/900/190

Ceiling installation



- Ceiling installation
- Led can be deactivated from the remote control

Floor Installation



- It always find his place!

Quite & Slim

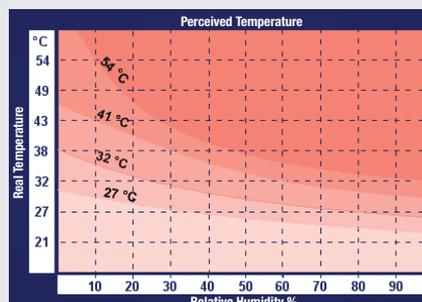


- Easy installation and condensate draining
- Easy maintenance

The depth of only 19 cm and the noise of 24 dB (A), configure this iSeries unit as an excellent solution for villas, offices, hotel rooms, restaurants, public places ...

Humidex

The units are provided with a special humidity sensor. The humidity sensor signal is used by the logic, placing it in relation with the temperature measured by the room air and Humidex sensor, which measures the perception of the human body considering the combined effects of temperature and humidity. This function is available only in "auto heating mode" and "auto cooling mode".





High quality for a classic unit of the air conditioning

CA

Model:

CA8FIA
CA9FIB
CA10FIC
CA13FID

CA, the cassette unite that often we can see above our heads in public spaces, offices, restaurant etc... It well suited also in the home, but it is more common to find it installed in the service sector.



INFRARED+WIRE
included wired option

Humidity sensor

A



Dimensions: HxLxD 296x575x575 mm
Weight: A | 19 kg - B | 20,5 kg

B

C



Dimensions: HxLxD 338x860x860 mm
Weight: 22 kg

D



Dimensions: HxLxD 338x860x1150 mm
Weight: 30,5 kg

5 in 1
Air Conditioner
Heat pump
Dehumidifier
Purifier
Fan

From the small to the big commercial space



AS

		CA8FIA	CA9FIB	CA10FIC	CA13FID
Air flow rate I.U. (el.-l.-m.-h.)	m ³ /h	200/530/630/750	200/530/630/750	850/1060/1160/1300	1200/1700/1980/2300
Dehumidification	l/h	1,2	2,3	3,6	3,6
Fan speed	N°	Auto + 3 remote control settings			
Sound pressure I.U. (el.-l.-m.-h.)	dB(A)	27-43-46-50	27-43-46-50	38-43-44-46	38-44-48-52
Electrical power supply	V/Ph/Hz	230/1/50-60	230/1/50-60	230/1/50-60	230/1/50-60
Type of motor	-	DC Motor Inverter	DC Motor Inverter	DC Motor Inverter	DC Motor Inverter
Power input max	W	8-24-28-36	8-24-28-36	13-20-25-41	22-36-43-64
Type of motor	mm (")	6,35(1/4")	6,35(1/4")	6,35(1/4")	6,35(1/4")
Liquid pipe diameter	mm (")	9,52(3/8")	12,7(1/2")	12,7(1/2")	12,7(1/2")
Gas pipe diameter	kg	19	20,5	22	27
Net weight I.U.	mm	296x575x575	296x575x575	310x760x760	338x1050x760
Net dimensions I.U. (H./W./D.)	mm	41x730x730	41x730x730	30x860x860	30x1150x860

Available in size A and B and with a slightly larger dimension in size C(80x80) and size D (110x80), is built with great attention to detail, insulated sheets, four flap flocked anti-drain, fan balanced with great care, high quality plastic material grille and large filter easily accessible for cleaning.

CA is ready with an air exchange outlet, mandatory for installations in public spaces and it's equipped with a condensate drain pump. As all the other unit of the iSERIES™ range, **CA** is controlled by the universal remote control, that in the usual places in which this unit is installed express its best, like the wired connection as alternative to the wireless one and the management in group on units, very useful in open space, restaurant room, big hall of the hotel....

* For the pipes adapter, see the installation manuals.

Quality and design grille



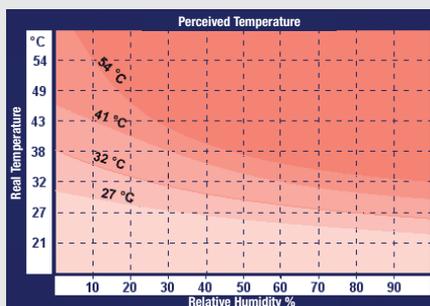
- Integrated Drain Pump
- Arranged for air exchange

Flocked anti-drain flap



Humidex

The units are provided with a special humidity sensor. The humidity sensor signal is used by the logic, placing it in relation with the temperature measured by the room air and Humidex sensor, which measures the perception of the human body considering the combined effects of temperature and humidity. This function is available only in "auto heating mode" and "auto cooling mode".



Maintenance simple and convenient



- Body in anti-corrosion metal



So slim that it disappears!

SD

Model:
SDA8FIA
SDA9FIB

SD, the compact & slim ducted that can be installed both on the floor or on the ceiling, can be masked in special spaces created with plasterboard or wood or false-ceilings.

5 in 1
Air Conditioner
Heat pump
Dehumidifier
Purifier
Fan



INFRARED+WIRE
included wired option

Humidity sensor

SD **A**
B



Dimensions: HxLxD 585x890x190 mm
Weight: 25 kg

Discreet & quiet, can be recessed both in vertical or horizontal



SD

		SDA8FIA	SDA9FIB
Air flow rate I.U. (el.-l.-m.-h.)	m³/h	310-390-430-520-600	440-500-590-700-790
Dehumidification	l/h	1,3	3,3
Fan speed	N°	Auto + 3 remote control settings	
Sound pressure I.U. (el.-l.-m.-h.)	Pa	7,5	10
Electrical power supply	dB(A)	24-26-30-37	35-40-46-49
Type of motor	V/Ph/Hz	230/1/50-60	230/1/50-60
Power input max	-	DC Motor Inverter	DC Motor Inverter
Type of motor	kW	0,037	0,075
Liquid pipe diameter	A	0,17	0,33
Gas pipe diameter	mm (")	6,35(1/4")	6,35(1/4")
Net weight I.U.	mm (")	9,52(3/8")	12,7(1/2")
Net dimensions I.U. (H./W./D.)	kg	25	25
Dimensioni nette U.I. (Alt/Lar/Pro)	mm	585x890x190	585x890x190

SD is available in both sizes A and B keeping the same case and dimensions. They are very easy to install and to maintain thanks to

washable filters easy to be accessed; SD can be managed wireless or wired with the universal iSERIES remote control.

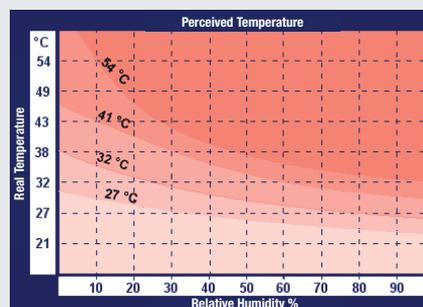
Remote infrared or wired



- Remote control and infrared receiver
5m cable included

Humidex

The units are provided with a special humidity sensor. The humidity sensor signal is used by the logic, placing it in relation with the temperature measured by the room air and Humidex sensor, which measures the perception of the human body considering the combined effects of temperature and humidity. This function is available only in "auto heating mode" and "auto cooling mode".



Augmented pressure

A special function can be activated removing a special jumper on the electronic board, it allows to increase the pressure for climate more room near each other, without the needs of standard duct type unit make the most of silence and slim design of the SD.

Ceiling installation



ONLY
18,9 cm!!!

The depth of only 19 cm and the noise level of 24 dB(A), make this unit of the iSERIES™ range, as an excellent solution for home, offices, hotel rooms, restaurant, public spaces...

Floor installation



- Vertical installation



The ducted solution reliable and flexible

DS

5 in 1

- Air Conditioner
- Heat pump
- Dehumidifier
- Air Filtration
- Fan

Model:

DSA14FIB
DSA10FIC

AD, the mid static pressure duct unit, combined with the plenum built on site with or without the aid of the three way plenum.





INFRARED+WIRE
included wired option

Humidity sensor



Dimensions: HxLxD 266x1175x636 mm
Weight: 23.5 kg

Ideal solution for open space or multi-zone



DS

		DSA14FIB	DSA10FIC
Air flow rate I.U. (el.-l.-m.-h.)	m³/h	450/550/720/850	600/720/950/1050
Dehumidification	l/h	2,3	2,5
Fan speed	N°	Auto + 3 remote control settings	
Sound pressure I.U. (el.-l.-m.-h.)	Pa	50/62	50/62
Electrical power supply	dB(A)	32-35-42-47	35-40-46-49
Type of motor	V/Ph/Hz	230/1/50-60	230/1/50-60
Power input max	-	DC Motor Inverter	DC Motor Inverter
Type of motor	kW	0,076	0,118
Liquid pipe diameter	A	0,68	0,95
Gas pipe diameter	mm (")	6,35(1/4")	6,35(1/4")
Net weight I.U.	mm (")	12,7(1/2")	12,7(1/2")
Net dimensions I.U. (H./W./D.)	kg	23,5	23,5
Dimensioni nette U.I. (Alt/Lar/Pro)	mm	266 x 1175 x 636	266 x 1175 x 636

DS, as the cassette unit, is mainly dedicated for the service applications, is built with great attention for the material used and in the craftsmanship of the details.

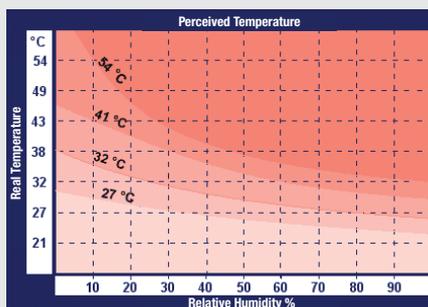
Available in size B and C are equipped with high quality centrifugal fans and integrated condensate drain pump; with washable filter easy to maintain can be managed with the universal iSERIES™ remote control, wireless or wired.

Static pressure up to 62 Pa

A special function can be activated removing a dedicated jumper on the electronic board, This function grant to increase the pressure to duct longer distances.

Humidex

The units are provided with a special humidity sensor. The humidity sensor signal is used by the logic, placing it in relation with the temperature measured by the room air and Humidex sensor, which measures the perception of the human body considering the combined effects of temperature and humidity. This function is available only in "auto heating mode" and "auto cooling mode".

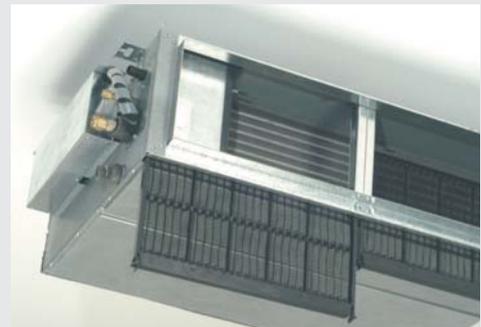


Remote infrared or wired



- Remote control and infrared receiver
5m cable included

Comfortable and flexible



- Removable filters



- Standard duct plenum



- Plenum built on site

SDHV SMALL DUCT HIGH VELOCITY

The Unico System®
Small-Duct Central Heating & Air Conditioning

SDHV (Small Duct High Velocity) is an extension of the Argo iSeries system that makes it possible to distribute air for cooling or heating through various flexible ducts connected through a main duct with one or more ductable indoor units.

The available indoor units will come in two sizes: 1218 (size B), 2430 (size C) and 3036 (size D).

Unit 1218 is of the “monobloc” type consisting of a single section that includes the part housing the fan and the part with the direct expansion coil. Instead units 2430 and 3036 are of the “modular” type consisting of two separate sections (fan + direct expansion coil) which must be coupled with special hooks during installation.

The main feature of this type of ductable systems is the possibility of distributing air inside the environments to be air-conditioned with tubes with a very small diameter (just 50 mm). This is possible thanks to the high speed of the air, about 5 m/s, leaving each terminal. The air distribution tubes are built to prevent the transmission of noise to the environments. They are made of woven nylon (a material that dampens noise by nature) and wrapped in a metal wire to ensure stiffness. Thanks to this expedient, sound pressure values are reached which are completely similar to those of the best wall mounted split units on the market today (approx. 21 dBA). Adjusting the air flow in the system is managed by the sophisticated DC Inverter electronics as in all the models of the Argo iSeries range. In SDHV applications, the control system does not manage just the modulation of the compressor and the fan motor of the outdoor unit but also the modulation of the fan motor of the ductable unit so that the air flow is always a function of the requested heat load.

The result is an always optimal distribution of air which triggers an air mixing mechanism and guarantees a very uniform temperature distribution in the environments.

The air outlets may be of various shapes: circular (standard solution) or rectangular. The outlets may be installed on walls/ceilings and on the floor. Various finishings are available (various types of wood or aluminium), which make the SDHV terminals perfect for any environment.

There is a host of applications for these systems, all characterised by two great advantages: reduced visual impact and simple and quick installation.

The SDHV iSeries systems are well suited for domestic/residential environments, where the need for an uninvasive centralised system is a key design feature. Furthermore, with these systems it is possible to air-condition environments which were hardly feasible with traditional systems (split type) such as: bathrooms, kitchens, etc... In case of highly efficient pre-fabricated houses, the delivery outlets and the flexible hoses can be easily concealed directly in the wall at the time of construction.

iSeries SDHV is just as interesting when used for installations in the service sector (offices) or commercial (shops) environments. In these cases the possibility of using several indoor ductable units to create different climatic areas in an open space environment is an asset. Each indoor unit will be individually adjusted with its digital remote control.

The installation is always very flexible and not very difficult. Except for the main duct, all the accessories (flexible tubes, delivery outlets, assembly kit) are supplied. The flexible hoses also make installation very easy by limiting the typical worksite problems to the minimum.

TOP FEATURES

- From 2 up to 5 m/s of speed on every terminal
- 50 mm diameter distribution duct
- 30% more of dehumidification
- Less heatin loose in the duct (reduced passage area and better insulation)
- Air temperature uniform in the room, thanks to a gretly reduced layering effect

HIGH PRESSURE

The units i1218, i2430 and i3036 can be used also as AHU (Air Handling Unit) for high pressure duct installations

Contacty pre-sales service

SDHV i1218



SDHV i2430



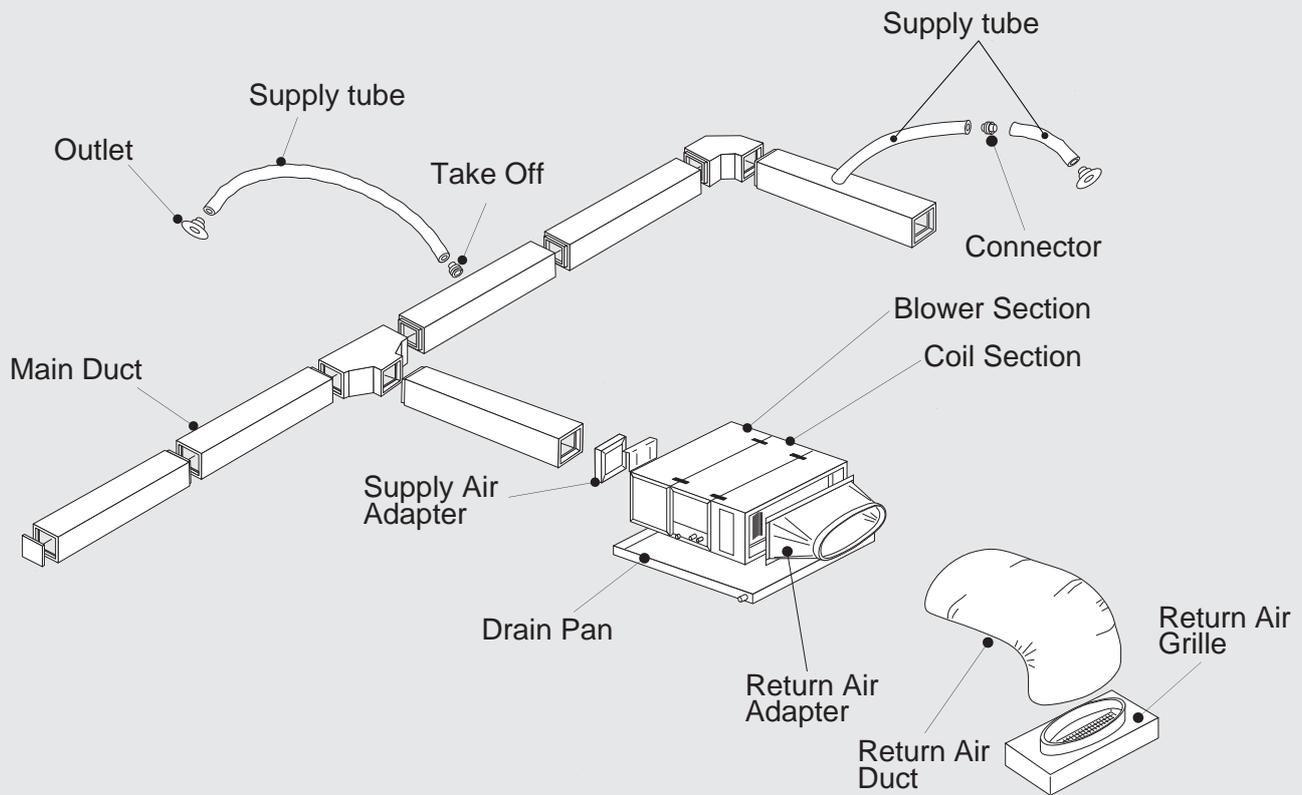
SDHV i3036



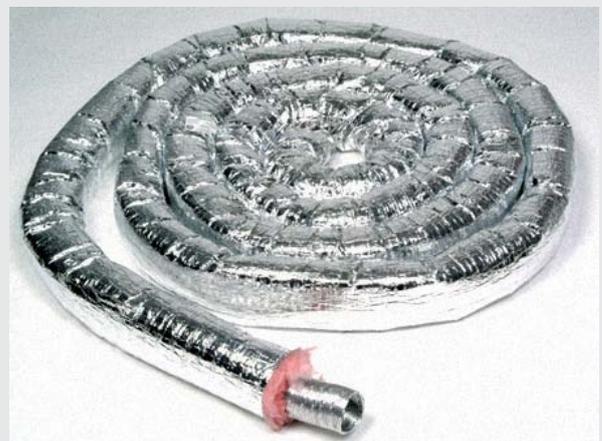


SDHV

		SDHV i1218	SDHV i2430	SDHV i3036
Air flow rate (min./max)	m ³ /h	340/680	510/1020	340/1274
Static pressure (min./max)	Pa	373	373	373
Fan speed	N°	Auto	Auto	Auto
Sound pressure	dB(A)	56	56	56
Electrical power supply	V/Ph/Hz	230/1/50	230/1/50	230/1/50
Power input	kW	0,19	0,29	0,35
Current input	A	1,22	1,86	2,24
Liquid pipe diameter	mm (")	6,35(1/4")	6,35(1/4")	9,5(3/8")
Gas pipe diameter	mm (")	12,7(1/2")	12,7(1/2")	15,8(5/8")
Net weight I.U.	kg	42	56	62
Net dimensions I.U. (H./W./D.)	mm	305 x 965 x 508	445 x 698 x 635	445 x 698 x 762



Flexible silenced tube



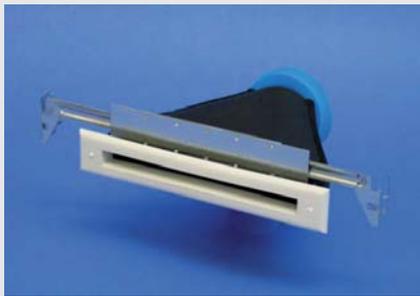
Aluminium flexible tube (optional)



Standard outlet to distribute air into the environment



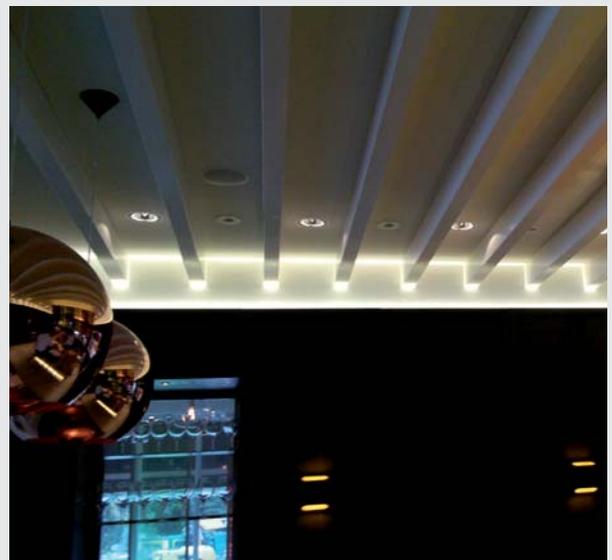
Optional outlets in different finishes



Rectangular outlet



90° attachment rectangular outlet





Return air adapter



Return air duct



Return air grille with filter



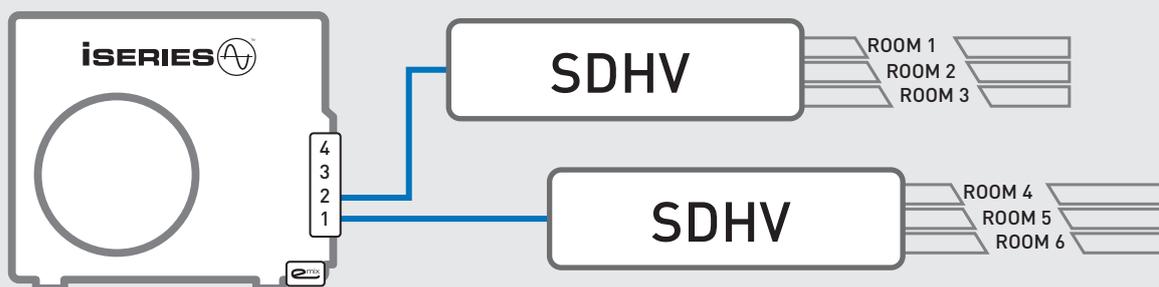
Control box unit is designed and built to be used with SDHV (Small Duct High Velocity) indoor units. In this way, they can be integrated in iSeries system, like any other indoor units. This control system brings a brand new feature for ducted indoor units: automatic control of air flow rate, according to indoor temperature set point. Why is this feature so important? Because, in this way, the amount of air flow is always adjusted following the temperature difference between indoor spaces and setpoint. The result of this type of regulation is a very high level of comfort both in cooling and in heating operation. Control box unit has three main components: main metal box, IR receiver and IR wireless controller.

Main unit is composed by electronic boards with BUS and power line wiring connections, inside a metal box. This box has to be fixed with screws on ducted indoor unit; its position can be choose according to available space (lateral side or upper side). Installation is always easy and comfortable. There are some input contacts on main electronic

boards, such as: remote on/off contact, optional drain pump and a flow switch used to turn off the unit in case condensate overflow.

Infrared receiver is connected with main electronic board with a 10 meters cable. The receiver is normally wall mounted. Its function is to transmit the signals coming from wireless controller to electronic control system. There are three leds on it, for stand by or operation status and for timer.

Wireless controller coming with Control Box is the same of any other iSeries indoor unit. In this case, it works like an indoor thermostat which will communicate (through infrared receiver) the indoor temperature to main control board. In this way, thanks to advanced regulation control system, air flow rate will be modulated matching indoor temperature and setpoint. iFeel function is very useful in this case. This option compares air temperature value read by wireless controller and return air one. Normally, in a ducted application the controller will be placed far from return air point. iFeel function, providing a better analysis of temperature trend, will help control system calculating the right amount of air flow for indoor rooms.



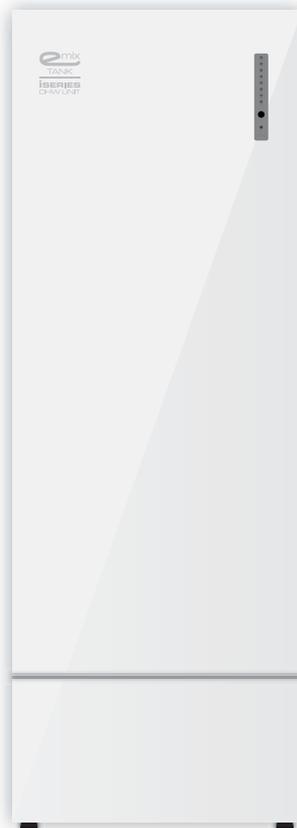
Another great innovation introduced in the SDHV systems thanks to iSeries, is the possibility of multi unit configuration. It is possible to connect several indoor units to an outdoor unit of a suitable size in a typical multi-split configuration. In this way, it is very simple to manage two different areas (also an open space) without having to resort to motorised blinds which act on the main duct. Each area is managed through a dedicated indoor unit connected with its own universal remote control, which will work as a digital thermostat. The great advantage of this solution is that it simplifies both installation (no dampers, no area thermostats) and management (one remote control against several thermostats).

EMIX

eMix is the innovative indoor unit in the iSERIES™ range, able to provide domestic hot water from a thermo-dynamic source all year round, i.e. independently of the system's operating mode.



EMIX



EMIX TANK 220



EMIX TANK 300



Emix Emix Tank 220 Emix Tank 300

Electrical power supply	V/Ph/Hz	230/1/50		230/1/50-60 - 400/N3/50			
Minimum power input	W/A	15 / 0,20		44 / 0,24			
Maximum power input	W/A	70 / 0,53		53 / 0,29			
Water connections	inch	3/4" G - 3/4" G (1/2" G - 1/2" G per AEI1G140EMX)					
Gas connections	inch	3/8" - 3/8"					
Net weight I.U.	kg	16,5		95		114	
Net dimensions I.U. (H./W./D.)	mm	268x527x285		1460x598x618		1875x598x618	
Electric back up heaters	kW	control only		3 (1+1+1)		3 (1+1+1)	
Tank	lt	Aside 300/200/100		Built-in 220		Built-in 300	
Tank material	-	-		Stainless steel AISI404		Stainless steel AISI404 or Enamelled	
Tank ERP class	-	minimum: C		C		C	
812 814 = DHW / 811 813 = Combi	-	DHW	Combi	DHW	Combi	DHW	Combi
ERP	-	A	A	A	A	A	A
Load profile (tapping)	-	XL	XL	XL	XL	XL	XL
ERP efficiency	η%	90,10	85,00	98,63	92,97	98,00	92,00
COP dhw	-	2,23	2,10	2,45	2,35	2,44	2,30
Heating time from 10°C up to 50°C	h:m	5:06	3:40	3:57	2:50	5:23	3:58
Max. Water Quantity 40°C	lt	390	390	280	280	390	390
Working Max. Pressure	Bar	10		10		10	
Operating Outdoor Temperature	°C	See outdoor units					

Data compliant: 811/813 2013 for Combi Heater and 812/814 2013 for Water Heater with EN16147 test requirements.
 A water softener is advised to reduce the loss of performance of the heat exchanger. eMix inlet and outlet taps are advised. Add pressure reducers for high pressures.
 Use a 3/4" G hydraulic filter if not already present in the system (provided with eMix, to be field supplied with eMix Tank)

Why eMix?

Domestic hot water service is always required in every type of building, from small flats to big hotels or open space offices. Among all available technologies, heat pump is one of the best choice for domestic hot water production, since it is a renewable source of energy, as stated by European Community. For this reason, eMix is designed to upgrade iSeries system making it fully capable to provide not only heating and cooling in different solutions, but also domestic hot water service.

eMix concept is totally new and brings a great innovation: finally its possible to produce hot water during cooling. Standard heat pumps are designed to provide cooling or domestic hot water but not at the same time. eMix wipes away this limit with its revolutionary technology and makes iSeries the only heat pump system capable to provide cooling and domestic hot water service at the same time.

Domestic hot water with R410A

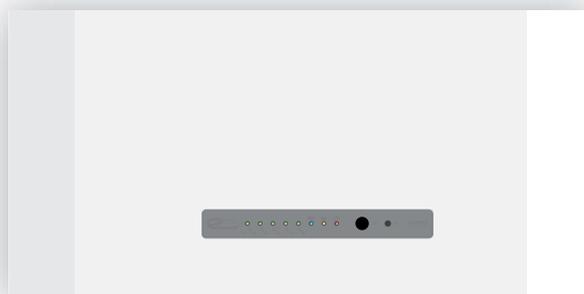
eMix unit is capable of produce hot domestic water up to 80° C (more than normally required, typical storage water temperature is set around 60° C) using only energy from the heat pump. The energy is taken by R410A gas; there is no need of secondary thermodynamic cycles. High temperatures of water are reached because eMix uses superheating power of refrigerant cycle. This energy "boost" maximum water temperature without using other mechanical or electrical components. Moreover, during cooling mode water heating is granted and it's free of charge. In fact it represents an effective process that normally does not occur. Instead of losing outside the heat taken from indoor rooms, it is partially transferred to water by eMix unit without increasing electric power input. From another point of view, iSeries in multisplit configuration (one indoor unit is enough) is an energy recovery system.

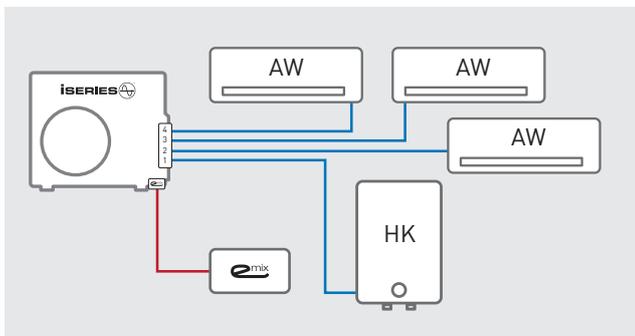
eMix & eMix Tank

eMix and eMix tank are two different solutions for the same aim: domestic hot water service. The difference stands in their construction concept: while eMix is a tankless solution, eMix tank is provided with a buffer storage inside a chassis. Operation of these two models is the same, the energy of heat pump is transferred to hot water.

eMix tank is a "turn key" solution very easy to set and to install. Since the only mechanical component inside the unit is a small pump, eMix tank has a noise level close to zero so it can be placed even in small space, maybe in the kitchen or directly in the bathroom.

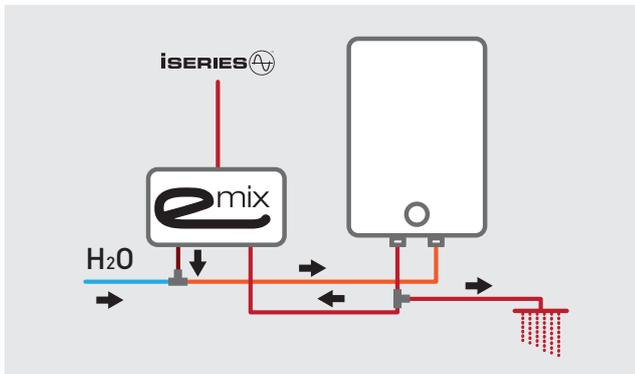
eMix tank is available in two sizes, according to tank volume of storage: 220 liters and 300 liters. First size is perfect for families of 3-4 people; second one is a good solution for bigger application (bar, pubs, small restaurant, large families).





eMix in iSeries system

eMix unit is part of iSeries system, like any other indoor units. The only difference stands in its purpose: as standard indoor units are designed to make air conditioning, eMix is meant to heat domestic water. How is it possible to install standard indoor units and eMix at the same time with a single outdoor unit? This is possible because outdoor units of iSeries range are equipped with a special port which connects only eMix unit while the other indoor units are placed on standard gas connections.

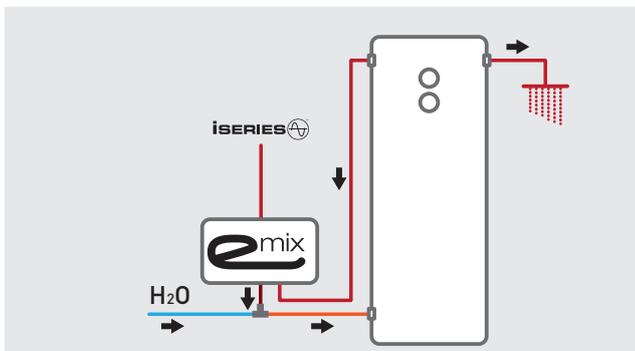


How does it work?

eMix unit is not an instantaneous solution, like gas boilers. It has been designed to heat water in every typology of storage tank: from standard electric boilers up to solar tanks.

Why is this possible? Because eMix has no temperature sensors to be installed in the buffer tank. Thanks to this solution, eMix works "in parallel" with the hydraulic circuit and directly connect to buffer tank. For this reason, installation is very simple and fast and matches any situation.

Electric boiler connection is one of the possibilities. Using it with a water storage tank the volume of water must be defined according to application requirements considering eMix performances.



Water temperature setting is very easy, too. There is only a button to be pushed to set desired temperature level which will be indicated through 5 green leds. Control system will take care of all the rest. End users have nothing to worry about: even the legionella protection cycle is automatically managed. Domestic hot water service is always granted, electronic regulation will balance all the system components in order to distribute the energy and to support both heating/cooling and hot water requests.

Emix components

Heat Exchanger

Heat exchanger is one of the major components of eMix unit. It is a double wall plate exchanger model made in stainless steel AISI316L. Double wall means that (as shown in the picture) between refrigerant gas R410A and domestic hot water there is a channel that prevent any leakage of either of the two fluids passing through the heat exchanger. In other words, there will be no contact between gas and water, even in case of damages. This solution is fully compliant with 98783/EC Regulation.

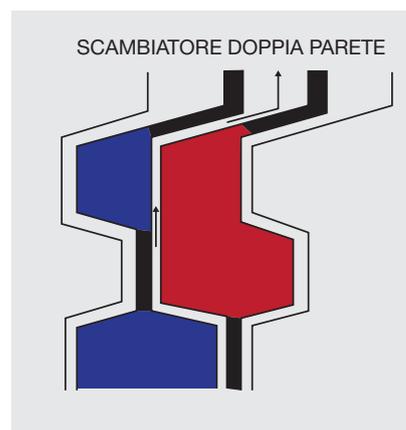
Inverter pump

Another very important component inside eMix unit is A class inverter pump. This pump is managed by embedded inverter control under iSeries major level electronic regulation. Pump control is very important during eMix operation. Changing its speed, heat transfer from gas to water will change too. This mean that control system will operate in order to maintain the correct speed value of the pump based on several conditions.

Water circuit

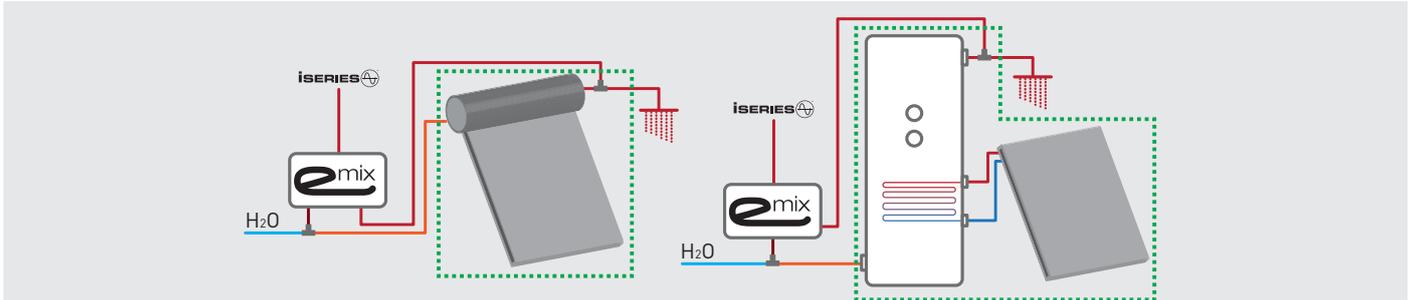
As already described, eMix has to be connected directly to domestic water circuit. It has been designed to work with tap water up to 10 bars and it is compatible with all the European countries tap water network. Normally during installation of standard products for DHW several accessories are provided: filters or softeners, mixing valves, vent valves, etc...

In particular filters or softeners installation is very important because these components avoiding limescale, will preserve heat exchanger during operation time.



Solar systems integration

Solar systems for DHW production are very common all around European countries (specially in south of Europe). They are normally divided in two categories: natural circulation and forced circulation. eMix can be connected both to natural and forced systems. It will work as integration of these systems in order to provide hot water when their performance are not very high (winter or night time) or when there is a big tapping request. Now it's clear why we decided to use eMix (energy Mixer) definition for this unit: because it can manage several sources of heating (solar panels, heat pump and electric heaters) always choosing and mixing the most efficient at the moment.



Electric back up heaters

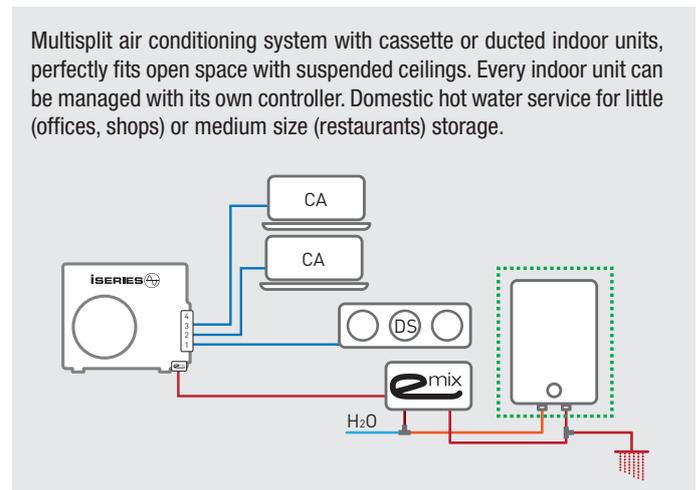
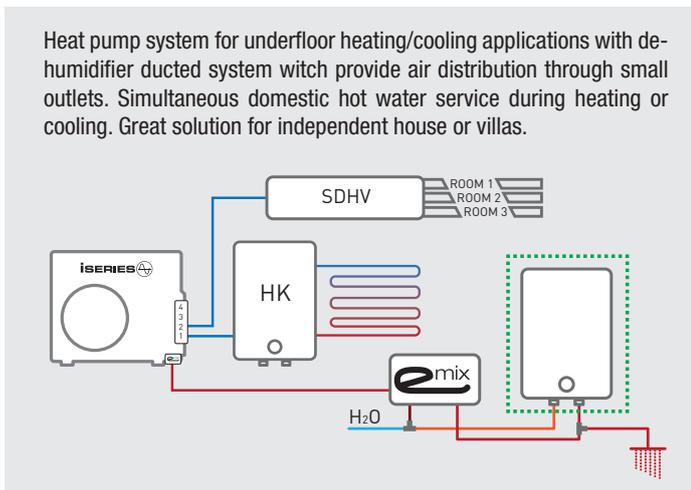
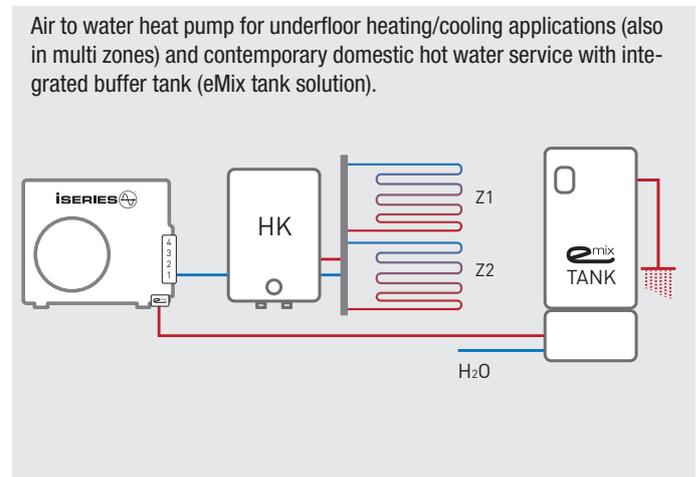
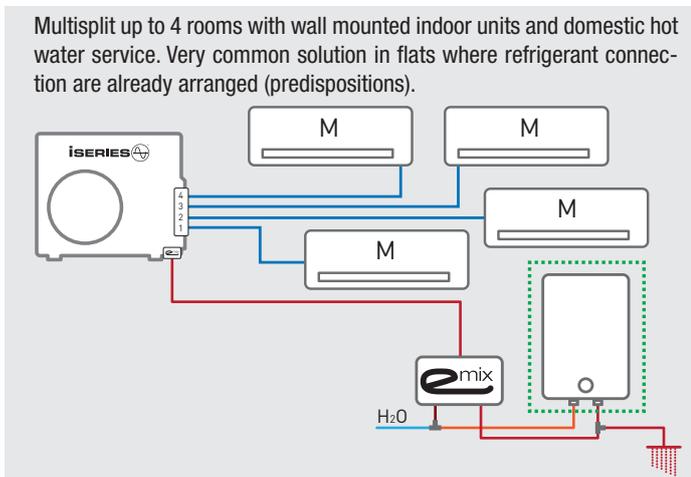
If buffer tank has electric heaters already installed, eMix unit can drive them. The only operation required is the electric connection between eMix and electric heaters. We suggest the adoption of a back-up electric heating system which will start in case of manutencion and to ensure the anti-legionella cycle.

A simple electric wiring is needed to connect the electric heaters. After this, end users can choose if use electric heaters manually (maybe to speed up water heating when it's necessary) or leave to control system their management. In this case, eMix software will use electric power only when strictly needed, having as first choice heat pump power or solar power (if a solar system is installed) since they are high efficiency heating sources.

eMix tank has 3 kw of electric heaters already embedded. Even with this unit, end users can decide if force operation of heaters or leave the management of the elements to control system.

eMix applications

eMix unit, as part of iSeries system, has a lot of possible applications. It can be added following iSeries matching tables (check our catalogues) mixed with standard direct expansion indoor units, hydrokit units or SDHV units. Flats, villas, offices, restaurants, shops: in every situation is always easy to find the best configuration of iSeries system with eMix unit for domestic hot water service. Some sample applications will follow:





HK

POMPA EC

Hydrokit versione con pompa di circolazione dell'acqua Inverter EC auto modulante

Hydrokit per pompe di calore e minichiller inverter

Hydrokit HKE, available in sizes B, C, D and E, is the indoor unit to be combined with the iSERIES™ outdoor units to create heating and air-conditioning solutions with underfloor, wall or ceiling mounted radiator systems.

The unit is already equipped with:

6 litre expansion tank

Circulation pump at 3 selectable speeds during start up,

Supplementary heating elements. The elements may be activated through a thermomagnetic switch in three steps: 2 kW; 2 + 2 kW; 2 + 4 kW. All the elements may be unpowered completely but, to guarantee the correct operation of the unit in every condition, it is advisable to leave one 2 kW step active. The control system is responsible for the electric backup management, which will only activate when necessary, based on the outdoor temperature or in case the temperature of the water in the system is too low.

The HK unit is easy to install thanks to its small size and may be installed up to 50 m with an additional load of refrigerant.

Hydrokit must be powered separately (it is not possible to connect power line from the outdoor unit) in both mono-phase and three-phase mode according to the network availability; it is necessary to connect HK always on line A of the outdoor unit.

The unit is provided with Aquaset Climatic Control and with water filter.

HK MATCHINGS

(B)	GR9FI50emx
(B) (C)	GR9FI65emx
(B) (C)	GR9FI80emx
(B) (C) (D)	GR9FI110emx
(B) (C) (D) (E)	GR9FI140emx

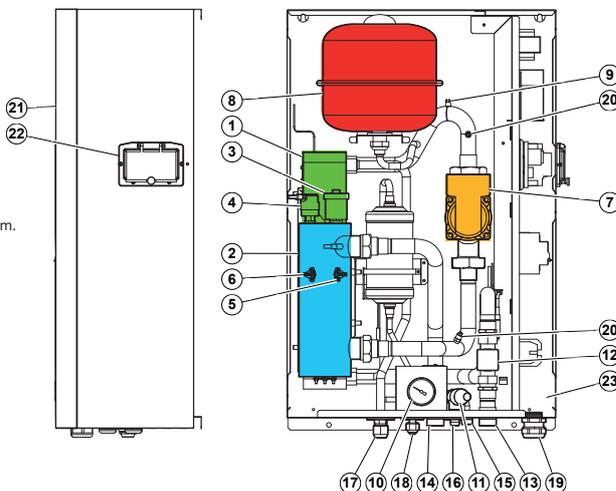
In case of installations in a mixed Air/Air + Air/Water configuration, the possible combinations with various indoor units can be extended according to the application (to be defined during the project).

		HKBE	HKCE	HKDE	HKEE
Multi stage electric backup	kW	2/4/6	2/4/6	2/4/6	2/4/6
Rated Input	A	27	27	27	27
Protected Rating	A	32	32	32	32
Electrical power supply	V/Ph/Hz	230/1/50 - 400/N3/50			
Sound pressure I.U.	dB(A)	38	38	38	38
Water Connections	inch	1" M	1" M	1" M	1" M
Gas Connections	inch	1/4" - 1/2"	1/4" - 1/2"	1/4" - 1/2"	1/4" - 1/2"
Net weight I.U.	kg	41	41	41	41
Net dimensions I.U. (H./W./D.)	mm	826x527x284	826x527x284	826x527x284	826x527x284
Operating range		-20°C / +43°C	-20°C / +43°C	-20°C / +43°C	-20°C / +43°C
Minimum Water Volume	lt.	50	50	65	65

- 1 - Plate type heat exchanger.
- 2 - Electric heater:

- 4 kW : 1st stage = 2 kW; 2nd stage = 2 kW.
- 6 kW : 1st stage = 4 kW; 2nd stage = 2 kW.

- 3 - Automatic air vent valve.
- 4 - Water pressostat.
- 5 - Automatic reset safety thermostat.
- 6 - Manual reset safety thermostat.
- 7 - Circulator pump.
- 8 - Surge tank.
- 9 - Manual air vent valve.
- 10 - Hydraulic system pressure gauge.
- 11 - Safety valve.
- 12 - Flow detector.
- 13 - Water inlet connection.
- 14 - Water outlet connection.
- 15 - Filling / drainage of the water system.
- 16 - Safety valve drain connection.
- 17 - Flare gas connector.
- 18 - Flare liquid connector.
- 19 - Electrical cable passage.
- 20 - Water system pressure tap for flow control.
- 21 - Cover.
- 22 - Communication module access window.
- 23 - Electrical box

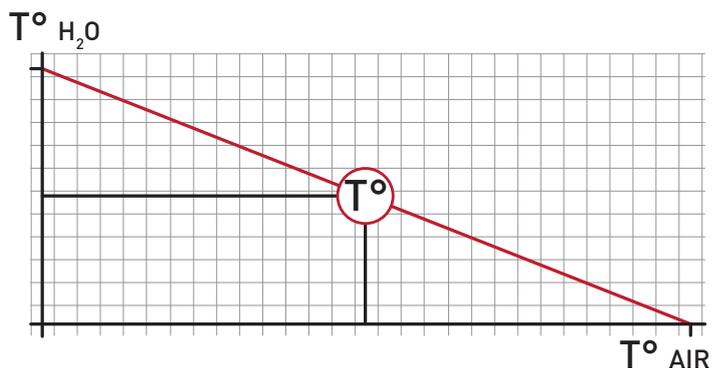


Materials:

- Copper piping.
- Stainless steel water heat exchanger.
- Painted sheet metal cabinet.



DIGITAL CLIMATIC INCLUDED



- Underfloor heating
- Radiators heating
- Fan coils heating
- Underfloor cooling
- Fan coils cooling
- To be mixed with direct expansion units
- Manage hybrid systems with gas heater
- Integrated expansion tank
- Safety double valve
- Integrated electric back-up heater

ErPA⁺ A⁺⁺⁺
55°C 35°C



Fan coil high-wall for all hydronic iSeries systems

MPW

5 in 1

Air Conditioner
Heat pump
Dehumidifier
Purifier
Fan

Elegant and discreet, available in two sizes 1/2 and 3/4, an indoor unit to suit all tastes, suitable for all settings both in terms of design and heat output.

Mandatory accessory: 3-way valve kit.



WITH INFRARED
REMOTE INCLUDED

1
2



Dimensions: HxLxD 270x805x215 mm

Weight: 8 kg

3
4



Dimensions: HxLxD 285x995x240 mm

Weight: 12 kg

Accessories

Type	Code
3 way valve + by-pass	70600071

to be fitted outside the appliance during installation work

4 models up to over 5kW for two pipes installations

		MPW 1	MPW 2	MPW 3	MPW 4
Type		2 pipes	2 pipes	2 pipes	2 pipes
Codes - Models with remote control		MPW 1 B5X	MPW 2B5X	MPW 3B5X	MPW 4B5X
Codes - Models without remote control		MPW 1 B5B	MPW 2B5B	MPW 3B5B	MPW 4B5B
Total cooling capacity (kW)(1)	BV/MV/AV	0,80 / - / 1,24	0,96 / - / 1,67	1,91 / 2,53 / 3,17	2,62 / 3,14 / 3,67
Sensible cooling capacity (kW)(1)	BV/MV/AV	0,58 / - / 0,94	0,74 / - / 1,3	1,53 / 1,89 / 2,56	2,12 / 2,50 / 3,01
Heating capacity (kW) (2)	BV/MV/AV	1,11 / - / 1,72	1,49 / - / 2,38	2,70 / 3,50 / 4,50	3,70 / 4,50 / 5,50
Heating capacity with electric heating element (kW)		-	-	-	-
Air flow rate (m ³ /s-m ³ /h)	BV	0,042 - 150	0,05 - 180	0,089 - 320	0,131 - 470
	MV	-	-	0,111 - 400	0,161 - 580
	AV	0,061 - 220	0,075 - 270	0,142 - 510	0,197 - 710
Water flow rate in cooling mode (l/h) (1)	AV	215	290	545	630
Pressure drop in cooling mode (kPa)(1)	AV	16,1	27,2	20,0	27,0
Pressure drop in heating mode (kPa)(2)	AV	15,3	26,2	19,0	26,0
Electricity supply (V/ph/Hz)		230/1/50	230/1/50	230/1/50	230/1/50
Total power consumption (kW)	AV	0,025	0,025	0,075	0,08
Total current (A)	AV	0,11	0,11	0,33	0,36
Hydraulic connection		1/2" G female	1/2" G female	1/2" G female	1/2" G female
Sound power level (dBA)	BV/MV/AV	32 / - / 41	35 / - / 45	46 / 52 / 58	48 / 53 / 59
Sound pressure level (dBA)at a distance of 2 m indoors	BV/MV/AV	23 / - / 32	26 / - / 36	37 / 43 / 49	39 / 44 / 50

The sound pressure levels of products conform to European standard EN 12102

10 kPa = 1mCE

Nominal conditions

(1) Air inlet 27°C (DB) / 19°C (WB)
Water inlet 7°C
Water outlet 12°C

(2) Air inlet 20°C
Water inlet 50°C (same water flow rate as for conditions in (1))
Max. T of water generated 60°C

Satin White



The casing for model **MP** is treated using a photo engraving technique to obtain a satin effect on the plastic, this is done during the injection stage and no further treatments are applied. You can see the quality of the material and manufacturing process used with the naked eye, this sets the **MP** unit apart from other white wall-mounted indoor units.

Can be installed from 1.7 m



MP allows condensation discharge to the right or left, it has LEDs that can be deactivated and washable filters, it is compact and easy to install.

Active charcoal filters, always clean air

The optional activated charcoal filter is comprised of a layer of synthetic material folded to increase the filtering surface area and treated with a professional anti-bacterial solution, combined with an activated charcoal mesh. Activated charcoal is a material mainly made up of carbon in the form of graphite micro crystals treated in such a way as to create a porous structure with a vast internal

surface area. When the forced air flow passes through the filter element, the charge of static energy allows the filter to trap even the smallest particles of pollutants and allergens, down to a size of 0.01 microns. The activated charcoal layer attracts and absorbs the organic molecules responsible for unpleasant odours, eliminating them completely.



Fan coil a pavimento soffitto tutto idronico

KPSW

5 in 1

Air Conditioner
Heat pump
Dehumidifier
Purifier
Fan

The attractive and slimline KPSW models can be installed as floor-standing or ceiling-mounted units, to offer uniform installation throughout every building. The active carbon filter, available as an optional extra, deodorises the air in the room. It supplements the standard filter, which captures dust.

Mandatory accessory: 3-way valve kit

KPSW



Dimensions: HxLxD 680x900x190 mm
Weight: 23.5 kg



WITH INFRARED REMOTE INCLUDED
or WIRED OPTIONAL

Accessories

Type	Code
3 way valve + by-pass	70600071

to be fitted outside the appliance during installation work

Perfect integration and easy maintenance

		KPSW 2	KPSW 3	KPSW 4
Type		2 pipes	2 pipes	2 pipes
Codes - Models with remote control		KPSW 2 B5X	KPSW 3 B5X	KPSW 4 B5X
Codes - Models without remote control		KPSW 2 B5B	KPSW 3 B5B	KPSW 4 B5B
Total cooling capacity (kW)(1)	BV/MV/AV	1,07 / 1,80/ 2,40	1,13 / 2,40 / 3,19	1,77 / 3,00 / 3,60
Sensible cooling capacity (kW)(1)	BV/MV/AV	0,93 / 1,50 / 1,97	0,95 / 1,80 / 2,47	1,48 / 2,50 / 3,06
Heating capacity (kW) (2)	BV/MV/AV	1,84 / 2,70 / 3,48	2,05 / 3,40 / 4,07	2,40 / 4,30 / 5,30
Air flow rate (m ³ /s-m ³ /h)	BV	0,056/200	0,058/210	0,092/330
	MV	0,083/300	0,119/430	0,158/570
	AV	0,115/415	0,144/520	0,188/675
Water flow rate in cooling mode (l/h)	AV	420	550	617
Pressure drop in cooling mode (kPa)(1)	AV	21	26,6	26
Pressure drop in heating mode (kPa)(2)	AV	13	23,7	23
Electricity supply (V/ph/Hz)		230/1/50	230/1/50	230/1/50
Total power consumption (kW)	AV	0,034	0,046	0,080
Total current (A)	AV	0,16	0,23	0,40
Hydraulic connection		1/2" G male	1/2" G male	1/2" G male
Sound power level (dBA)	BV/MV/AV	35 / 43 / 48	35 / 45 / 50	40 / 51 / 54
Sound pressure level (dBA) at a distance of 2 m indoors BV/MV/AV		27 / 35 / 40	27 / 37 / 42	32 / 43 / 46

The sound pressure levels of TECHNIBEL products conform to European standard EN 12102

10 kPa = 1mCE

Nominal conditions

(1)	Air inlet	27°C (DB) / 19°C (WB)	(2)	Air inlet	20°C
	Water inlet	7°C		Water inlet	50°C (same water flow rate as for conditions in (1))
	Water outlet	12°C		Max. T. of water generated	60°C

Ceiling installation



- Ceiling installation
- LED operation can be deactivated by remote control

Floor Installation



- It fits everywhere!!!

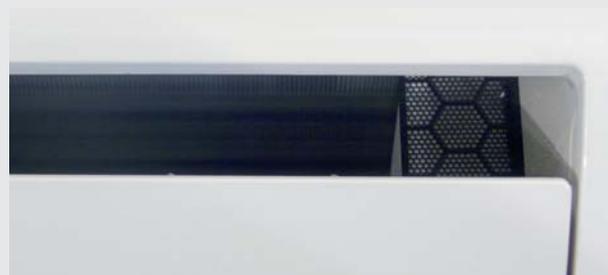
Quiet and slim



- Easy installation and condensation discharge
- Easy maintenance

La profondità di soli 19 cm e la silenziosità di 24 dB(A), configurano questa unità della gamma iSERIES™, come una eccellente soluzione per ville, uffici, camere di hotel, ristoranti, locali pubblici...

Drip prevention



- Condensation anti-drip system



Cassette fan coil for all hydronic iSeries systems

CAW

5 in 1

Air Conditioner
Heat pump
Dehumidifier
Purifier
Fan

CAW, the cassette unit for dropped ceilings that we can often observe above our heads in public spaces, offices, shops and restaurants.

Unit's structure is made by galvanised steel, externally and internally insulated with heat and soundproof materials.

Now the range is available with dc inverter technology drain pump included.

Mandatory accessory: 3-way valve kit

UNIT

CAW3P2I5AA	+	K70N145TAA
CAW4P2I5AA	+	K70N145TAA
CAW5P2I5AA	+	K70N145TAA
CAW6P2I5AA	+	K70N146TAA
CAW8P2I5AA	+	K70N147TAA
CAW10P2I5AA	+	K70N147TAA

GRILLE



Accessories

Type		Code
3 way valve + by-pass	Cassette with pipes 1/2"	70600088
	Cassette with pipes 3/4"	70600089

to be fitted outside the appliance during installation work

3
4
5



Dimensions: HxLxD 296x575x575 mm
Weight: 3 | 19 kg - 4/5 | 20,5 kg

6



Dimensions: HxLxD 338x860x860 mm
Weight: 22 kg

8
10

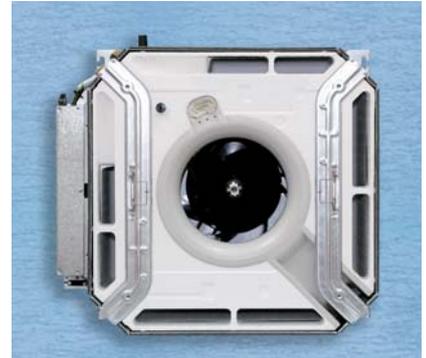


Dimensions: HxLxD 338x860x1150 mm
Weight: 30,5 kg

Ratings and technical data of CAW fan coil units with 1 heat exchanger for 2 pipes systems													
Model	CAW3P2I				CAW4P2I				CAW5P2I				
Speed	1	2	3	4	1	2	3	4	1	2	3	4	
water temperature 7/12°C, air temperature dry bulb 27°C, wet bulb 19°C													
Total cooling capacity	kW	1,24	2,15	2,35	2,60	1,70	3,50	4,00	4,60	2,46	3,80	4,42	5,06
Sensible cooling capacity	kW	0,92	1,78	2,00	2,23	1,15	2,63	3,06	3,56	1,82	2,87	3,33	3,80
Water flow	l/h	213	368	404	445	291	600	687	789	422	653	758	869
Pressure drop	kPa	3	8	9	11	3	11	14	17	7	14	18	23
inlet water temperature 50°C, water flow rate same as in cooling mode, air inlet temperature 20°C													
Heating capacity	kW	1,55	2,83	3,11	3,49	1,87	4,35	4,85	5,70	3,35	5,33	6,14	6,75
Pressure drop	kPa	3	7	8	10	3	10	13	17	6	14	18	23
water temperature 60/50°C, air temperature 20°C													
Heating capacity	kW	2,02	3,72	4,09	4,61	2,42	5,70	6,32	7,46	4,46	7,11	8,17	8,91
Water flow	l/h	175	323	355	400	210	495	549	648	387	617	710	774
Pressure drop	kPa	2	6	7	8	2	7	9	12	5	12	16	18
Water content	dm ³	0,43				0,86				0,86			
Air flow	m ³ /h	180	400	460	520	200	530	630	750	370	630	760	880
Power input	W	4,25	10	12,5	15	8	24	28,1	36,2	12,2	33,5	40	46,3
Sound power level (1)	dB(A)	30	41	44	46	32	48	51	55	41	53	57	61
Sound pressure level (2)	dB(A)	25	36	39	41	27	43	46	50	36	48	52	56
Water connections	inches	1/2				1/2				1/2			
Unit dimensions HxLxP	mm	273x575x575				273x575x575				273x575x575			
Grille dimensions HxLxP	mm	64x730x730				64x730x730				64x730x730			



- Easy installation and discharge
- Perfect integration!



- Body in anti-corrosion metal



- Flocked anti-condensation flaps



- Simple and convenient maintenance

Ratings and technical data of CAW fan coil units with 1 heat exchanger for 2 pipes systems													
Model	CAW6P2I				CAW8P2I				CAW10P2I				
Speed	1	2	3	4	1	2	3	4	1	2	3	4	
water temperature 7/12°C, air temperature dry bulb 27°C, wet bulb 19°C													
Total cooling capacity	kW	4,20	5,00	5,40	6,00	5,50	6,50	8,00	9,10	6,23	8,09	8,90	9,92
Sensible cooling capacity	kW	3,13	3,70	3,99	4,40	4,11	5,08	6,10	6,84	4,69	6,17	6,87	7,71
Water flow	l/h	720	859	930	1029	944	1116	1373	1561	1070	1389	1529	1702
Pressure drop	kPa	16	22	25	30	21	28	41	51	27	42	50	60
inlet water temperature 50°C, water flow rate same as in cooling mode, air inlet temperature 20°C													
Heating capacity	kW	5,40	6,40	7,10	7,70	6,28	8,52	9,42	10,19	7,34	9,53	10,59	11,69
Pressure drop	kPa	15	21	25	30	21	29	39	48	26	42	49	60
water temperature 60/50°C, air temperature 20°C													
Heating capacity	kW	7,08	8,39	9,33	10,08	8,14	11,24	12,26	13,18	9,52	12,34	13,73	15,11
Water flow	l/h	615	729	810	875	707	976	1065	1145	827	1072	1192	1312
Pressure drop	kPa	12	16	19	22	12	21	24	27	16	26	31	37
Water content	dm ³	1,00				1,50				1,50			
Air flow	m ³ /h	850	1060	1160	1300	830	1190	1270	1400	1200	1700	1980	2300
Power input	W	13	20	25	41	15	22	41	55	22	36	43	64
Sound power level (1)	dB(A)	43	48	49	51	37	46	50	53	43	49	53	57
Sound pressure level (2)	dB(A)	38	43	44	46	32	41	45	48	38	44	48	52
Water connections	inches	3/4				3/4				3/4			
Unit dimensions HxLxP	mm	273x766x766				290x1066x766				290x1066x766			
Grille dimensions HxLxP	mm	64x860x860				64x1150x860				64x1150x860			

Modbus

The cassette hydronic range iSeries are manageable by central control Modbus often used in intelligent buildings



SACbus

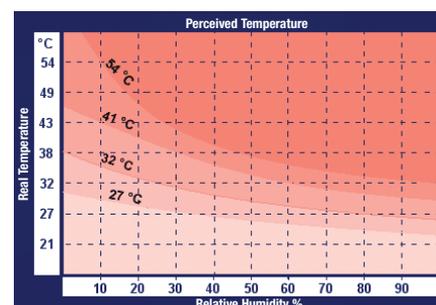
The cassettes of the hydronic range iSeries via the SAC RS485 bus are ideal for centralized controls of different cassettes in parallel between them

RS485



Humidex

The units are provided with a special humidity sensor. The humidity sensor signal is used by the logic, placing it in relation with the temperature measured by the room air and Humidex sensor, which measures the perception of the human body considering the combined effects of temperature and humidity. This function is available only in "auto heating mode" and "auto cooling mode".





eco
friendly

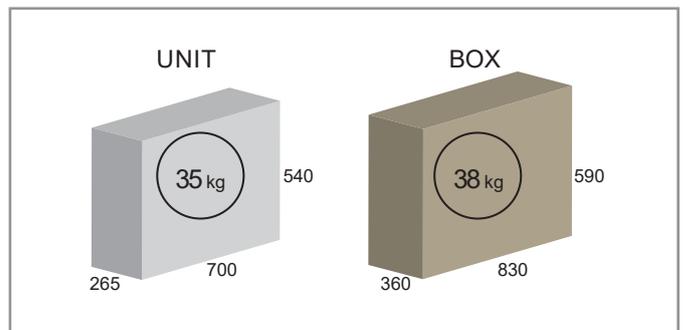
GR9FI 30 LT

The smallest in A++ class

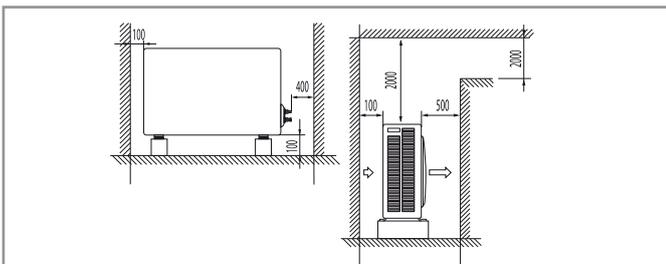
The smallest outdoor unit of the iSeries range, used with size A indoor units air/air in the following types: walls, floor, floor/ceiling, cassette and slim ducted.

Compliant with ERP/Ecodesign, this compact unit is the perfect choice for many applications for heating and cooling because it makes more than 2000 Watt with a temperature of -20 °C

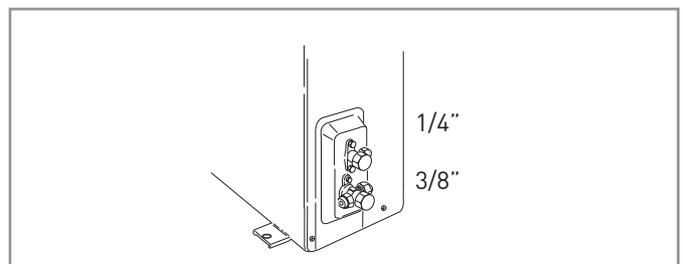
DIMENSIONS (mm)



MINIMUM OPERATION AREA (mm)



GAS CONNECTIONS



EXTENDED RANGE

-32°C | +50°C

UPDATE

FLASH MEMORY

CONNECTION

WEB CONTROL

AIR / AIR

ERP Ecodesign - EN14825

COOLING +35°C	Pdesignc	kW	2,7	A++
	SEER		6,1	
HEATING Average -10°C	Pdesignh	kW	3,0	A
	SCOP		3,8	

ERP Ecodesign - EN14825 - Part Load

	35°C	30°C	25°C	20°C	12°C	7°C	2°C	-7°C	TOL
kW - kW	2,68	2,06	1,17	1,20	1,17	1,04	1,70	2,65	2,15
EER - COP	3,41	4,63	7,28	8,99	5,57	4,86	3,94	2,42	2,10

COOLING

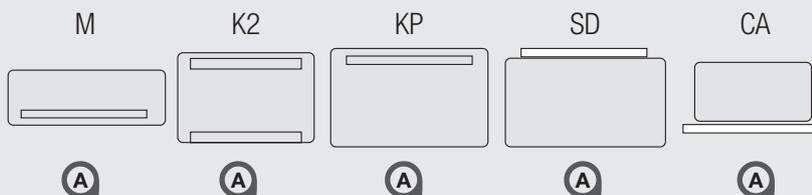
		CAPACITY kW	EER
+35°C UE / 27/19°C UI	Max	3,7	3,41

HEATING

		CAPACITY kW	COP
+12/11°C UE / +20°C UI	Max	4,6	3,40
+7/6°C UE / +20°C UI	Max	3,9	2,60
+2/1°C UE / +20°C UI	Max	2,5	2,30
-7/-8°C UE / +20°C UI	Max	2,7	2,42
-10/-11°C UE / +20°C UI	Max	2,4	2,20

UNI 11300-4 - Full load maximum power

MATCHINGS



Power supply	V/Ph/Hz	230/1/50-60
Power Input (max.)	W/A	1550/ 6,90
R410A standard refrigerant charge	kg	0.81
Compressor Type		Single Rotary
Fan speed		Auto
Sound pressure (max.)	dB(A)	40

Liquid Pipe	mm(inch)	6,35 (1/4")
Gas Pipe	mm(inch)	9,52 (3/8")
Total length of pipes (standard load)	m	7,5
Total length of pipes (additional load)	m	15
Maximum height difference (total)	m	10



eco
friendly

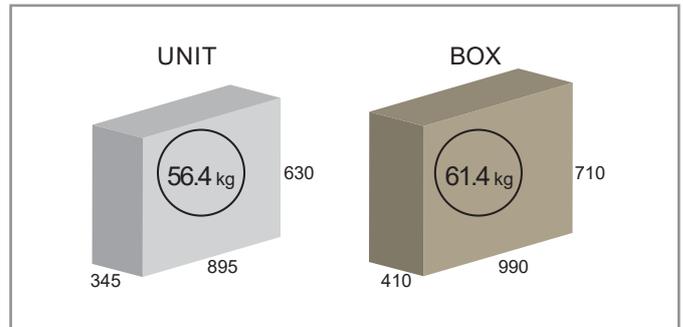
GR9FI 40 LT

Compact and powerful

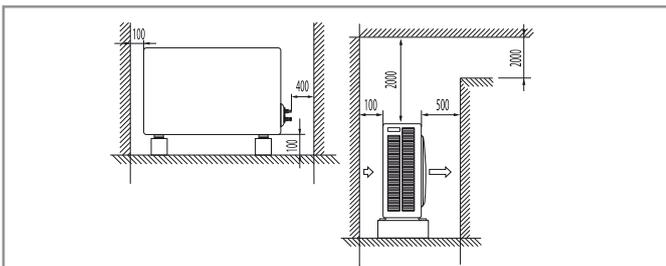
A top level A++ mono-split outdoor unit of the iSeries range, to be used with any size A of the different kind of air to air indoor units: high wall, floor, floor/ceiling, cassette and slim ducted.

Fully compliant with ERP/Ecodesign regulation, this high quality and reliable outdoor unit is a perfect choice in many applications, both for heating and cooling.

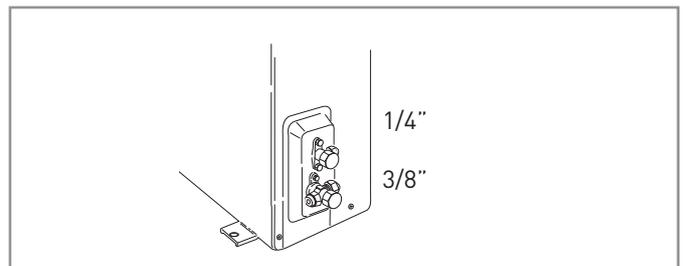
DIMENSIONS (mm)



MINIMUM OPERATION AREA (mm)



GAS CONNECTIONS



EXTENDED RANGE

-32°C | +50°C

UPDATE

FLASH MEMORY

CONNECTION

WEB CONTROL

AIR / AIR

ERP Ecodesign - EN14825

COOLING +35°C	Pdesignc	kW	3,7	A++
	SEER		6,1	
HEATING Average -10°C	Pdesignh	kW	4,0	A+
	SCOP		4,0	

ERP Ecodesign - EN14825 - Part Load

	35°C	30°C	25°C	20°C	12°C	7°C	2°C	-7°C	TOL
kW - kW	3,67	2,67	1,73	1,31	1,06	1,43	2,22	3,51	2,98
EER - COP	3,60	4,96	6,88	8,89	5,98	4,84	3,98	2,69	2,28

COOLING

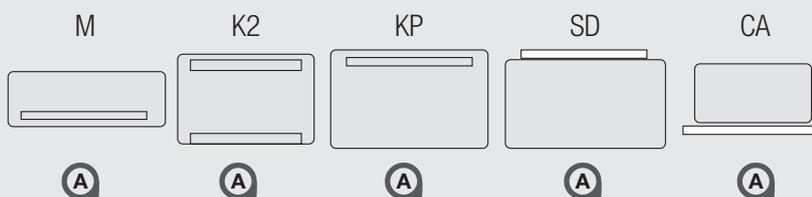
		CAPACITY kW	EER
+35°C UE / 27/19°C UI	Max	4,1	3,49

HEATING

		CAPACITY kW	COP
+12/11°C UE / +20°C UI	Max	5,6	3,61
+7/6°C UE / +20°C UI	Max	4,9	3,05
+2/1°C UE / +20°C UI	Max	3,1	2,42
-7/-8°C UE / +20°C UI	Max	3,5	2,69
-10/-11°C UE / +20°C UI	Max	3,3	2,46

UNI 11300-4 - Full load maximum power

MATCHINGS



Power supply	V/Ph/Hz	230/1/50-60
Power Input (max.)	W/A	1550/6,90
R410A standard refrigerant charge	kg	1,1
Compressor Type		Single Rotary
Fan speed		Auto
Sound pressure (max.)	dB(A)	44

Liquid Pipe	mm(inch)	6,35 (1/4")
Gas Pipe	mm(inch)	9,52 (3/8")
Total length of pipes (standard load)	m	7,5
Total length of pipes (additional load)	m	15
Maximum height difference (total)	m	10



eco
friendly

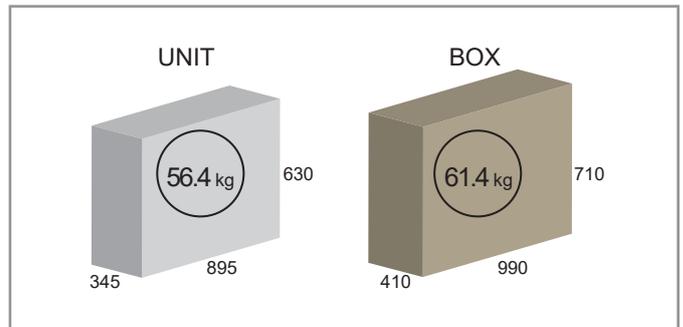
GR9FI 50 LT

Ideal also for ducted mono split

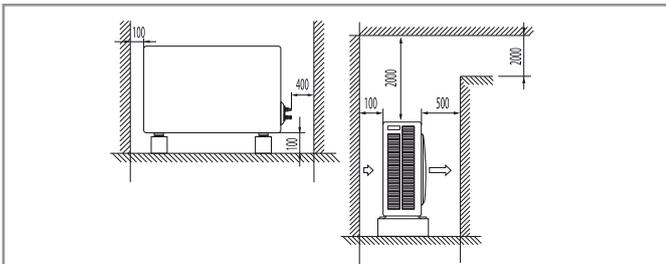
A top level and high capacity mono-split outdoor unit of the iSeries range, to be used with any size B of the different kind of air to air indoor units: high wall, floor, floor/ceiling, cassette and slim ducted.

Fully compliant with ERP/Ecodesign regulation, this high quality and reliable outdoor unit is a perfect choice to make many application both for heating and cooling.

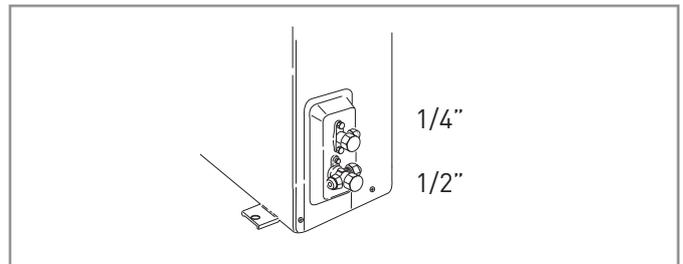
DIMENSIONS (mm)



MINIMUM OPERATION AREA (mm)



GAS CONNECTIONS



EXTENDED RANGE

-32°C | +50°C

UPDATE

FLASH MEMORY

CONNECTION

WEB CONTROL

AIR / AIR

ERP Ecodesign - EN14825

COOLING +35°C	Pdesignc	kW	5,2	A ⁺⁺
	SEER		6,7	
HEATING Average -10°C	Pdesignh	kW	4,5	A ⁺
	SCOP		4,2	

ERP Ecodesign - EN14825 - Part Load

	35°C	30°C	25°C	20°C	12°C	7°C	2°C	-7°C	TOL
kW - kW	5,21	3,81	2,47	1,17	0,80	1,47	2,39	3,90	3,04
EER - COP	3,38	5,31	8,17	8,97	5,59	5,42	4,12	2,73	2,59

COOLING

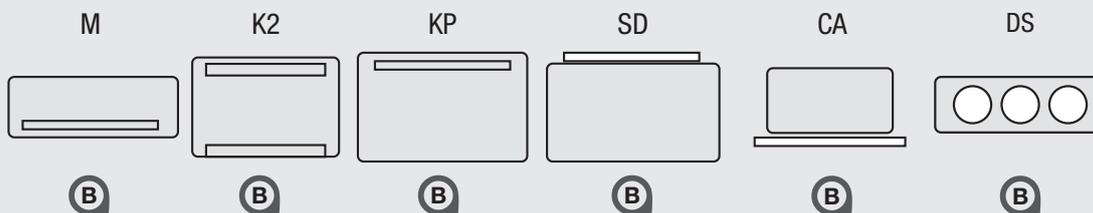
	CAPACITY kW	EER
+35°C UE / 27/19°C UI	Max 5,7	3,38

HEATING

	CAPACITY kW	COP
+12/11°C UE / +20°C UI	Max 6,1	3,68
+7/6°C UE / +20°C UI	Max 5,3	3,15
+2/1°C UE / +20°C UI	Max 3,5	2,81
-7/-8°C UE / +20°C UI	Max 3,9	2,73
-10/-11°C UE / +20°C UI	Max 3,3	2,62

UNI 11300-4 - Full load maximum power

MATCHINGS



Power supply	V/Ph/Hz	230/1/50-60
Power Input (max.)	W/A	1790 / 7,80
R410A standard refrigerant charge	kg	1,3
Compressor Type		Twin Rotary
Fan speed		Auto
Sound pressure (max.)	dB(A)	41

Liquid Pipe	mm(inch)	6,35 (1/4")
Gas Pipe	mm(inch)	12,77 (1/2")
Total length of pipes (standard load)	m	7,5
Total length of pipes (additional load)	m	15
Maximum height difference (total)	m	10

eco
friendly



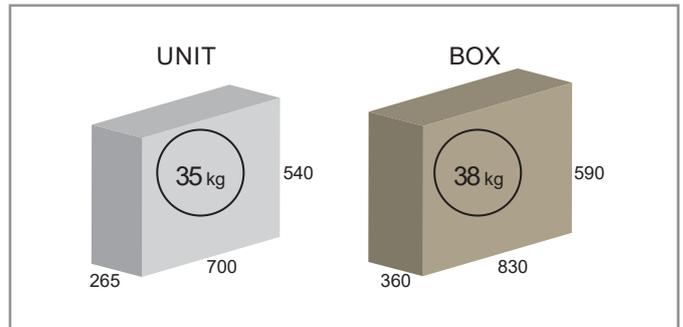
GR9FI 30 EMX

The smallest in A++ class also with DHW production

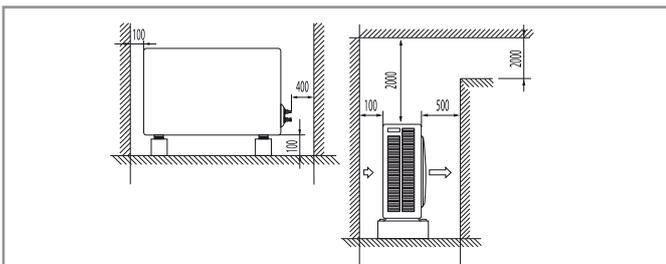
The smallest outdoor unit of the iSeries range, used with size A indoor units air/air in the following types: walls, floor, floor/ceiling, cassette and slim ducted. Compliant with ERP/Ecodesign

GR9FI30emx can be matched with an eMix or eMix tankto realize a split inverter system dedicated to the DHW production.

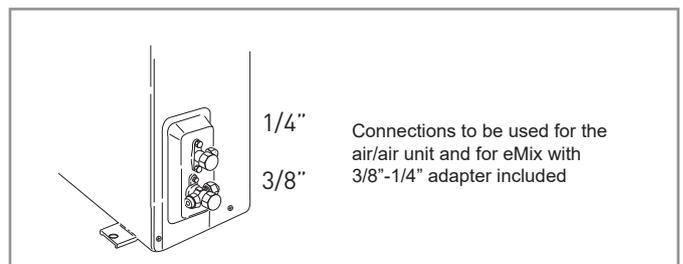
DIMENSIONS (mm)



MINIMUM OPERATION AREA (mm)



GAS CONNECTIONS



EXTENDED RANGE

-32°C | +50°C

UPDATE

FLASH MEMORY

CONNECTION

WEB CONTROL

AIR / AIR

ERP Ecodesign - EN14825

COOLING +35°C	Pdesignc	kW	3,6	A++
	SEER		6,2	
HEATING Average -10°C	Pdesignh	kW	3,2	A+
	SCOP		4,4	

ERP Ecodesign - EN14825 - Part Load

	35°C	30°C	25°C	20°C	12°C	7°C	2°C	-7°C	TOL
kW - kW	3,55	2,60	1,72	1,80	1,92	2,00	1,78	2,84	2,17
EER - COP	2,84	4,77	7,90	9,98	7,70	7,70	4,14	2,61	2,17

DHW ERP
See Emix

COOLING

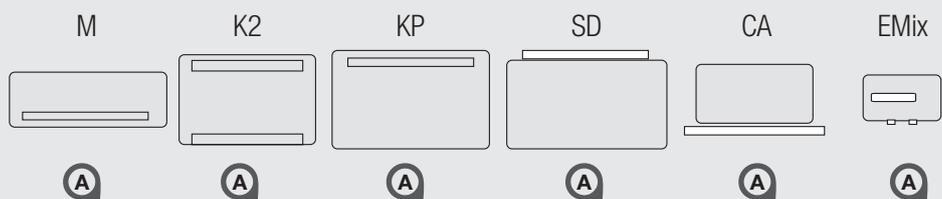
	CAPACITY kW	EER
+35°C UE / 27/19°C UI	Max 3,6	2,84

HEATING

	CAPACITY kW	COP
+12/11°C UE / +20°C UI	Max 4,5	4,1
+7/6°C UE / +20°C UI	Max 3,3	3,51
+2/1°C UE / +20°C UI	Max 2,7	2,40
-7/-8°C UE / +20°C UI	Max 2,8	2,61
-10/-11°C UE / +20°C UI	Max 2,7	2,43

UNI 11300-4 - Full load maximum power

MATCHINGS



Power supply	V/Ph/Hz	230/1/50-60
Power Input (max.)	W/A	1550/ 6,90
R410A standard refrigerant charge	kg	0.81
Compressor Type		Single Rotary
Fan speed		Auto
Sound pressure (max.)	dB(A)	40

Liquid Pipe	mm(inch)	6,35 (1/4")
Gas Pipe	mm(inch)	9,52 (3/8")
Total length of pipes (standard load)	m	7,5
Total length of pipes (additional load)	m	15
Maximum height difference (total)	m	10



eco friendly

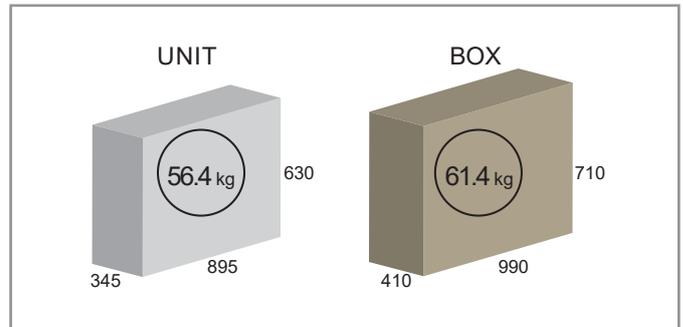
GR9FI 42 EMX

Mono or Dual Split with DHW

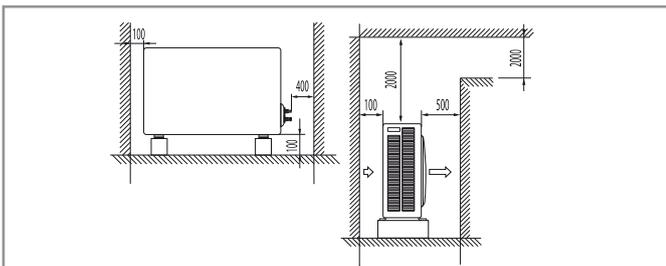
Outdoor unit that can be connected to any size A air/air indoor unit both in mono and dual configuration, or to just one size B air/air indoor unit.

It is also possible to connect an eMix or eMix tank (through the dedicated eMix port) to a size A or B indoor unit at the same time, for the production of hot water for domestic use. This means that with GR9FI42emx mono configurations with size A or B, dual with size A, mono size A or B plus eMix and dual with size A plus eMix are possible for air-conditioning and the simultaneous production of hot domestic water in both cooling and heating mode up to thermo-dynamic 80°C.

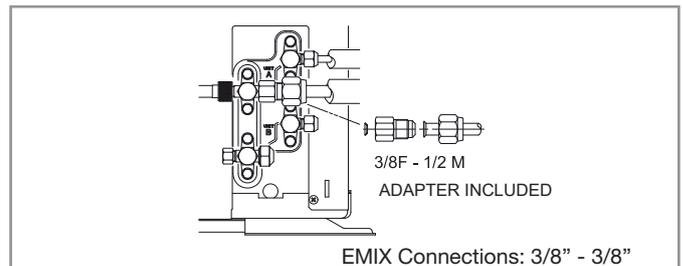
DIMENSIONS (mm)



MINIMUM OPERATION AREA (mm)



GAS CONNECTIONS



EXTENDED RANGE

-32°C | +50°C

UPDATE

FLASH MEMORY

CONNECTION

WEB CONTROL

AIR / AIR

ERP Ecodesign - EN14825

COOLING +35°C	Pdesignc	kW	4,3	A++
	SEER		6,5	
HEATING Average -10°C	Pdesignh	kW	3,4	A+
	SCOP		4,1	

ERP Ecodesign - EN14825 - Part Load

	35°C	30°C	25°C	20°C	12°C	7°C	2°C	-7°C	TOL
kW - kW	4,31	3,18	2,05	1,40	1,16	1,21	1,67	3,03	2,21
EER - COP	2,57	4,73	8,40	11,01	4,54	5,36	3,95	3,36	1,56

DHW ERP

See Emix

COOLING

	CAPACITY kW	EER
+35°C UE / 27/19°C UI	Max 4,3	2,76

HEATING

	CAPACITY kW	COP
+12/11°C UE / +20°C UI	Max 5,8	3,92
+7/6°C UE / +20°C UI	Max 5,2	3,62
+2/1°C UE / +20°C UI	Max 2,8	2,44
-7/-8°C UE / +20°C UI	Max 3,0	3,36
-10/-11°C UE / +20°C UI	Max 2,9	2,12

UNI 11300-4 - Full load maximum power

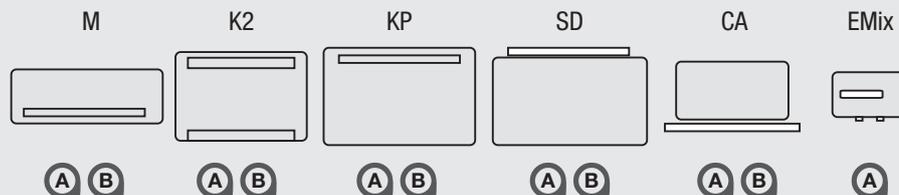
MATCHINGS

A + A

A + B

● A

B



● Ideal matching with Emix/Emix Tank

Power supply	V/Ph/Hz	230/1/50-60
Power Input (max.)	W/A	1790 / 7,80
R410A standard refrigerant charge	kg	1,3
Compressor Type		Twin Rotary
Fan speed		Auto
Sound pressure (max.)	dB(A)	41

Liquid Pipe	mm(inch)	6,35 (1/4")
Gas Pipe	mm(inch)	9,52 (3/8")
Total length of pipes (standard load)	m	Dual 15 / Mono 7,5
Total length of pipes (additional load)	m	Dual 30 / Mono 20
Pipe length per unit (standard load)	m	Dual 12
Pipe length per unit (additional load)	m	Dual 25
Maximum height difference (total)	m	10
Maximum height difference (between indoor units)	m	5



eco
friendly

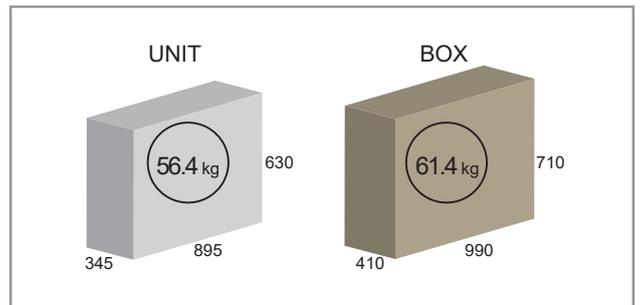
GR9FI 50 EMX

Multi function, ideal for high efficiency buildings

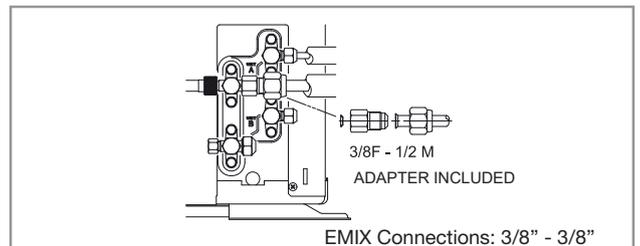
Mono/dual outdoor unit featuring great application flexibility; with GR9FI50emx is possible to connect all the indoor units of the of the air/air iSeries range, and the Hydrokit unit for underfloor heating systems in mono, multi and mixed air/air and air/water configuration. The port dedicated to eMix allows the simultaneous production of domestic hot water up to thermo-dynamic 80°C, with any combination (among those supported) of size A or B indoor units in both cooling and heating mode.

GR9FI50emx offers a range of solutions that go well beyond its mono/dual configuration; just think of a solution with a Hydrokit and a slim ducted SDIA unit, two units which can work at the same time or alternatively, for example to heat with the underfloor heating system and cool and/or de-humidify with the distribution of air through the SDIA unit. Obviously, the eMix or eMix tank module may be added to the two units to produce domestic hot water at the same time during both the heating period and the cooling period.

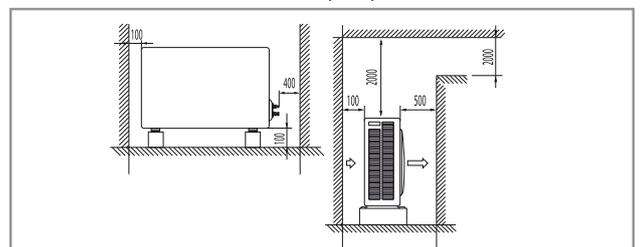
DIMENSIONS (mm)



GAS CONNECTIONS



MINIMUM OPERATION AREA (mm)



EXTENDED RANGE

-32°C | +50°C

UPDATE

FLASH MEMORY

CONNECTION

WEB CONTROL

AIR / AIR

ERP Ecodesign - EN14825

COOLING +35°C	Pdesignc	kW	5,4	A++
	SEER		6,4	
HEATING Average -10°C	Pdesignh	kW	4,3	A+
	SCOP		4,0	

ERP Ecodesign - EN14825 - Part Load

	35°C	30°C	25°C	20°C	12°C	7°C	2°C	-7°C	TOL
kW - kW	5,41	4,04	2,68	1,09	0,80	1,53	2,46	3,93	3,27
EER - COP	3,15	5,23	7,01	9,30	5,91	6,72	3,42	2,91	2,41

COOLING

	CAPACITY kW	EER
+35°C UE / 27/19°C UI	Max 5,9	3,15

HEATING

	CAPACITY kW	COP
+12/11°C UE / +20°C UI	Max 6,7	3,86
+7/6°C UE / +20°C UI	Max 6,0	3,35
+2/1°C UE / +20°C UI	Max 3,7	2,57
-7/-8°C UE / +20°C UI	Max 3,9	2,91
-10/-11°C UE / +20°C UI	Max 3,7	2,68

UNI 11300-4 - Full load maximum power

AIR / WATER

GR9FI50EMX+HKBE

EN14511

COOLING +35°C

		Max	Nom
Capacity @ 18/23°C	kW	4,5	3,3
EER @ 18/23°C		3,57	3,61
Capacity @ 7/12°C	kW	3,2	2,5
EER @ 7/12°C		1,97	1,99

ERP Ecodesign - EN14825

LOW - 35°C Average -10°C	Pdesignh	kW	5	A++
	η	%	162	
MEDIUM - 55°C Average -10°C	Pdesignh	kW	n.a.	-
	η	%	n.a.	

ERP Ecodesign - EN14825 - Part Load 35°C

	12°C	7°C	2°C	-7°C	TOL
kW	1,35	1,53	2,36	3,96	2,66
COP	7,44	5,06	4,01	2,79	1,92

DHW/Combi ERP
See Emix

UNI 11300-4 (35°C) - Full load maximum power

	12°C	7°C	2°C	-7°C
kW	5,88	5,30	3,26	3,96
COP	4,75	4,22	3,15	2,79

EN14511

	7°C	-7°C
kW	5,10	3,80
COP	4,40	2,79

MATCHINGS

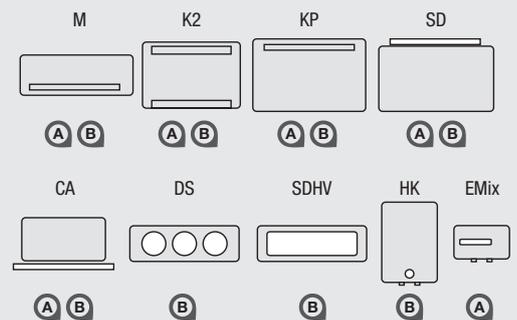
A + A

A + B

● **A**

● **B**

● Ideal matching with Emix/Emix Tank



Power supply	V/Ph/Hz	230/1/50-60
Power Input (max.)	W/A	1790 / 7,80
R410A standard refrigerant charge	kg	1,3
Compressor Type		Twin Rotary
Fan speed		Auto
Sound pressure (max.)	dB(A)	41

Liquid Pipe	mm(inch')	6,35 (1/4")
Gas Pipe	mm(inch')	9,52 (3/8")
Total length of pipes (standard load)	m	Dual 15 / Mono 7,5
Total length of pipes (additional load)	m	Dual 30 / Mono 20
Pipe length per unit (standard load)	m	Dual 12
Pipe length per unit (additional load)	m	Dual 25
Maximum height difference (total)	m	10
Maximum height difference (between indoor units)	m	5



eco
friendly

GR9FI65 EMX mono and three phases

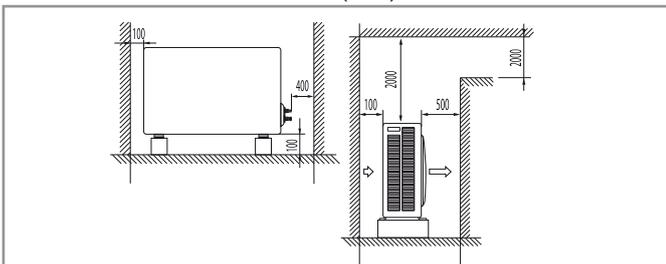
Multisplit, Monosplit Package and always DHW

GR9FI65emx, is a mono/dual/trial connections, compact size with the possibility of connecting an eMix or eMix tank, is suitable to create a wide range of summer and winter air-conditioning solutions, with or without domestic hot water production, in small family homes, residential flats or offices as well as in restaurants, shops and small stores.

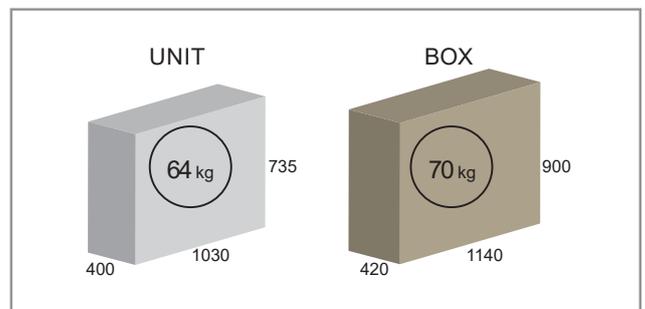
All the types of indoor units of the iSeries range are recognised and may work in single, multiple and mixed mode.

GR9FI65emx is very flexible in the mixed air/air configurations with air/water, allowing the installation of underfloor heating systems or low temperature radiators, at the same time as any type of direct expansion indoor units (wall mounted, floor/ceiling mounted, consoles, cassettes, ductable) and obviously the SDHV units with sound-proofed flexible ducting to reach every corner of the building, bathrooms and kitchen included. Worth remembering is the possibility of multi configuration with eMix and eMix tank units for the creation of cluster application suitable for the production of domestic hot water only.

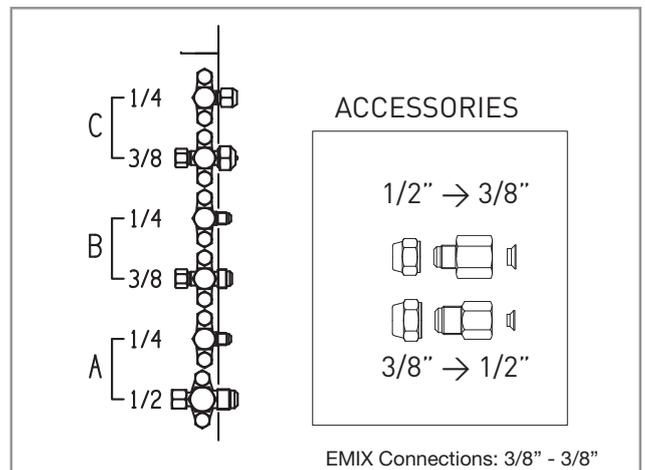
MINIMUM OPERATION AREA (mm)



DIMENSIONS (mm)



GAS CONNECTIONS



EXTENDED RANGE

-32°C | +50°C

UPDATE

FLASH MEMORY

CONNECTION

WEB CONTROL

AIR / AIR

ERP Ecodesign - EN14825

COOLING +35°C	Pdesignc	kW	6,5	A++
	SEER		6,5	
HEATING Average -10°C	Pdesignh	kW	6,4	A+
	SCOP		4,0	

ERP Ecodesign - EN14825 - Part Load

	35°C	30°C	25°C	20°C	12°C	7°C	2°C	-7°C	TOL
kW - kW	6,50	4,99	3,30	2,43	1,41	2,26	3,70	5,92	4,26
EER - COP	3,75	5,67	7,39	9,02	4,59	4,83	4,12	3,09	1,84

COOLING

CAPACITY kW

EER

+35°C UE / 27/19°C UI	Max	7,7	3,32
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HEATING

CAPACITY kW

COP

+12/11°C UE / +20°C UI	Max	9,1	3,50
+7/6°C UE / +20°C UI	Max	8,7	3,22
+2/1°C UE / +20°C UI	Max	5,6	2,94
-7/-8°C UE / +20°C UI	Max	5,9	3,09
-10/-11°C UE / +20°C UI	Max	5,3	2,25

UNI 11300-4 - Full load maximum power

AIR / WATER

GR9FI65EMX+HKCE

EN14511

COOLING +35°C

		Max	Nom
Capacity @ 18/23°C	kW	6,0	5,2
EER @ 18/23°C		3,60	3,78
Capacity @ 7/12°C	kW	5,2	4,6
EER @ 7/12°C		2,58	2,65

ERP Ecodesign - EN14825

LOW - 35°C Average -10°C	Pdesignh	kW	6	A++
	η	%	156	
MEDIUM - 55°C Average -10°C	Pdesignh	kW	4	A+
	η	%	105	

ERP Ecodesign - EN14825 - Part Load

35°C

55°C

	12°C	7°C	2°C	-7°C	TOL	12°C	7°C	2°C	-7°C	TOL
kW	1,95	2,09	3,22	5,41	2,41	1,67	2,20	2,28	3,78	2,56
COP	7,57	5,61	3,63	2,64	1,24	5,46	4,07	2,44	1,82	1,30

UNI 11300-4 (35°C) - Full load maximum power

EN14511

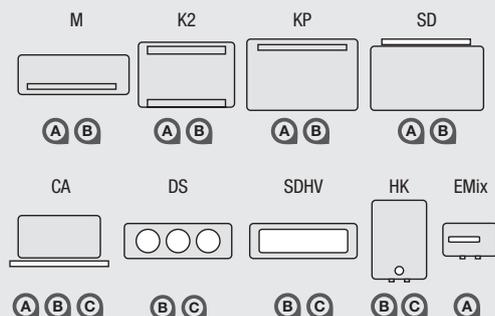
	12°C	7°C	2°C	-7°C	7°C	-7°C
kW	9,00	8,55	5,76	5,41	8,22	5,21
COP	4,48	4,13	2,93	2,64	4,14	2,80

DHW/Combi ERP
See Emix

MATCHINGS

- A + A + A
- A + A + B
- B + B
- A + B
- A + A
- B
- C

● Ideal matching with Emix/Emix Tank



Power supply	V/Ph/Hz	230/1/50-60 - 400/N3/50
Power Input (max.)	W/A	2600/12 - 5200/10x3
R410A standard refrigerant charge	kg	2.7
Compressor Type		Twin Rotary
Fan speed		Auto
Sound pressure (max.)	dB(A)	47

Liquid Pipe	mm(inch*)	6,35 (1/4")
Gas Pipe	mm(inch*)	9,52 (3/8") / 12,77 (1/2")
Total length of pipes (standard load)	m	Multi 30 / Mono 20
Total length of pipes (additional load)	m	Multi 45 / Mono 35
Pipe length per unit (standard load)	m	Dual 25 / Trial 20
Pipe length per unit (additional load)	m	Dual 30 / Trial 25
Maximum height difference (total)	m	10
Maximum height difference (between indoor units)	m	5



eco
friendly

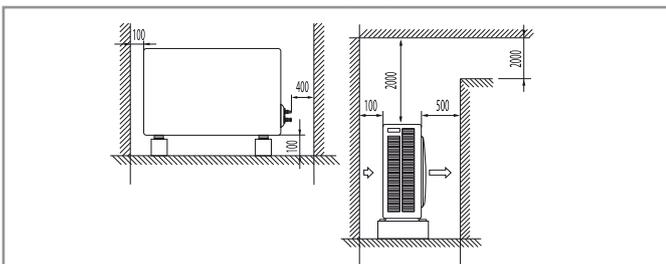
GR9F180EMX mono and three phases

Extreme flexibility between residential and commercial

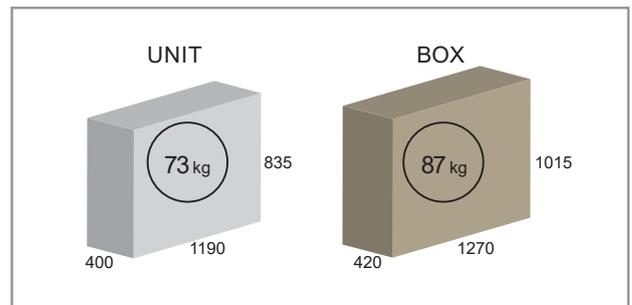
GR9F180emx is an outdoor unit for border applications between residential and small service sector complexes. With its thermal power, the compact size of a mono fan structure, the possibility of creating mono, dual, tri and quadri split systems and the simultaneous production of domestic hot water, AEI1G80emx is the perfect solution to use as a primary heating system, able to offer an air-conditioning service all year long, with an air and/or water unit, underfloor panel heaters or low temperature radiators, flexible ducting and hot water heated with the renewable energy of the GR9F180emx heat pump.

No less important is the possibility of installing up to four eMix units, dedicating GR9F180emx just to producing large quantities of domestic hot water for hotels, schools, factories, the availability of the version for three-phase power supply and the multiple opportunities offered for applications in the service sector with cassettes, ductable units, slim ducted for hotel, SDHV flexible ductable units.

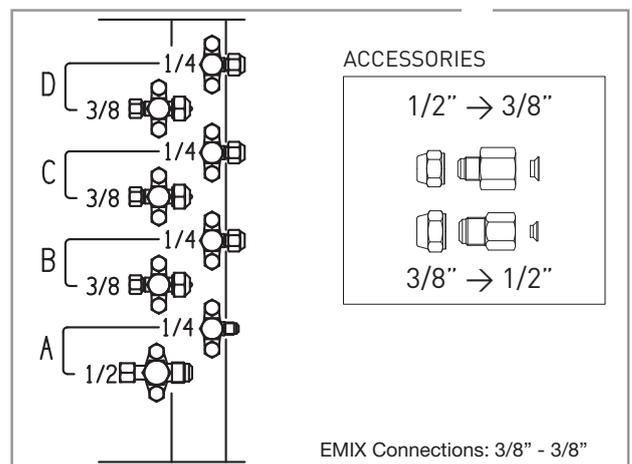
MINIMUM OPERATION AREA (mm)



DIMENSIONS (mm)



GAS CONNECTIONS



EXTENDED RANGE

-32°C | +50°C

UPDATE

FLASH MEMORY

CONNECTION

WEB CONTROL

AIR / AIR

ERP Ecodesign - EN14825

COOLING +35°C	Pdesignc	kW	9,0	A++
	SEER		6,7	
HEATING Average -10°C	Pdesignh	kW	7,7	A+
	SCOP		4,1	

ERP Ecodesign - EN14825 - Part Load

	35°C	30°C	25°C	20°C	12°C	7°C	2°C	-7°C	TOL
kW - kW	8,97	6,70	4,26	2,88	1,32	2,66	4,08	6,78	4,93
EER - COP	3,74	6,13	8,03	7,91	4,94	4,97	4,34	2,45	1,74

COOLING

	CAPACITY kW	EER
+35°C UE / 27/19°C UI	Max 9,6	3,74

HEATING

	CAPACITY kW	COP
+12/11°C UE / +20°C UI	Max 11,6	3,55
+7/6°C UE / +20°C UI	Max 11,2	3,27
+2/1°C UE / +20°C UI	Max 6,1	2,36
-7/-8°C UE / +20°C UI	Max 6,8	2,45
-10/-11°C UE / +20°C UI	Max 6,5	2,36

UNI 11300-4 - Full load maximum power

AIR / WATER GR9FI80EMX+HKCE

EN14511

COOLING +35°C	Max	Nom
Capacity @ 18/23°C	kW 8,0	7,1
EER @ 18/23°C	4,01	4,10
Capacity @ 7/12°C	kW 6,9	5,0
EER @ 7/12°C	2,84	2,90

ERP Ecodesign - EN14825

LOW - 35°C Average -10°C	Pdesignh	kW	7	A++
	η	%	157	
MEDIUM - 55°C Average -10°C	Pdesignh	kW	6	A+
	η	%	117	

ERP Ecodesign - EN14825 - Part Load 35°C 55°C

	12°C	7°C	2°C	-7°C	TOL	12°C	7°C	2°C	-7°C	TOL
kW	2,22	2,47	3,74	6,24	4,24	2,15	2,07	3,08	5,11	3,50
COP	7,32	5,47	3,81	2,50	1,60	5,68	3,94	2,94	1,82	1,27

UNI 11300-4 (35°C) - Full load maximum power

	12°C	7°C	2°C	-7°C	7°C	-7°C
kW	10,12	9,78	6,47	6,24	9,25	5,89
COP	3,95	4,04	2,74	2,50	4,12	2,70

DHW/Combi ERP
See Emix

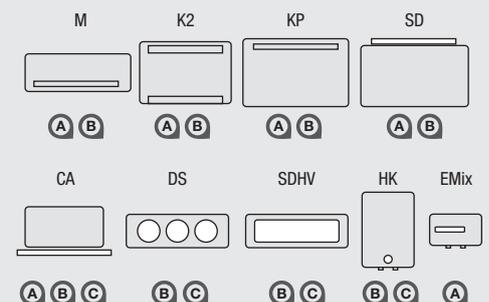
MATCHINGS

- A + A + A + A
- A + A + A + B
- A + A + A
- A + A + B
- A + B + B
- B + B
- A + B
- A + C
- C

● Ideal matching with Emix/Emix Tank

Power supply	V/Ph/Hz	230/1/50-60 - 400/N3/50
Power Input (max.)	W/A	3300/15 - 5200/10x3
R410A standard refrigerant charge	kg	2,9
Compressor Type		Twin Rotary
Fan speed		Auto
Sound pressure (max.)	dB(A)	47

Liquid Pipe	mm(inch*)	6,35 (1/4")
Gas Pipe	mm(inch*)	9,52 (3/8") / 12,77 (1/2")
Total length of pipes (standard load)	m	Multi 40 / Mono 30
Total length of pipes (additional load)	m	Multi 65 / Mono 50
Pipe length per unit (standard load)	m	30
Pipe length per unit (additional load)	m	30
Maximum height difference (total)	m	10
Maximum height difference (between indoor units)	m	5





eco
friendly

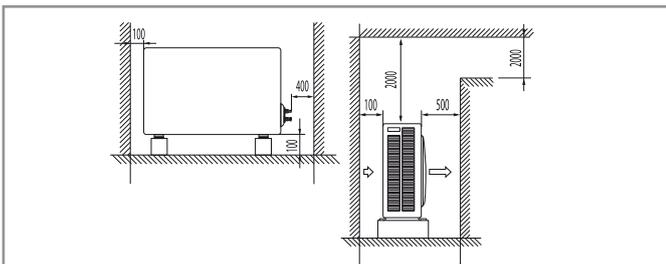


GR9FI110 EMX mono and three phases

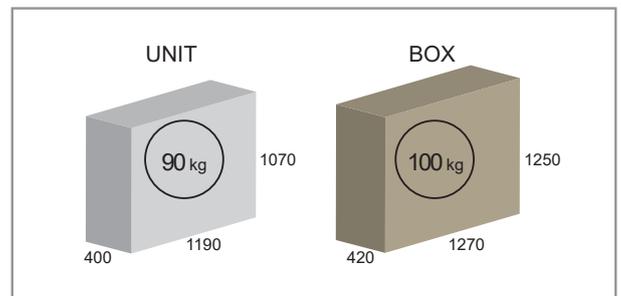
House, offices, big spaces... it's perfect and with DHW

It is the iSeries most powerful outdoor unit currently available; with its thermal 13 kW it perfectly suits the applications for the service sector, where the wide range of indoor units expresses its maximum flexibility. Likewise GR9FI110emx is a great primary heating and air-conditioning solution for moderately sized residential buildings, whether these are large flats or family homes. GR9FI110emx features a compact structure with a single fan in single-phase and three-phase version (during 2015) and offers four ports per indoor unit as well as the eMix port for the production of domestic hot water at the same time as heating and air-conditioning. Mono, dual, tri and quadri split solutions are thus possible by combining all the types and sizes of iSeries indoor units, standard air/air, SDHV type air/air, air/water (hydrokit for underfloor heating/cooling or low temperature radiators).

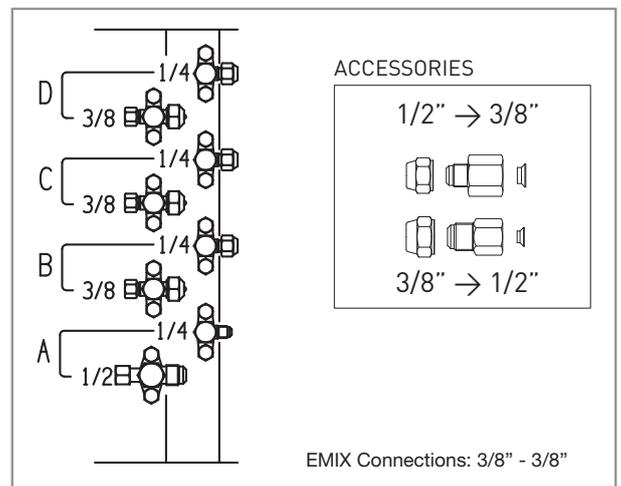
MINIMUM OPERATION AREA (mm)



DIMENSIONS (mm)



GAS CONNECTIONS



EXTENDED RANGE

-32°C | +50°C

UPDATE

FLASH MEMORY

CONNECTION

WEB CONTROL

AIR / AIR

ERP Ecodesign - EN14825

COOLING +35°C	Pdesignc	kW	10,6	A ⁺⁺
	SEER		6,6	
HEATING Average -10°C	Pdesignh	kW	9,4	A ⁺
	SCOP		4,1	

ERP Ecodesign - EN14825 - Part Load

	35°C	30°C	25°C	20°C	12°C	7°C	2°C	-7°C	TOL
kW - kW	10,64	7,83	5,09	4,22	3,59	3,37	5,22	8,30	6,01
EER - COP	3,44	5,07	8,07	9,67	7,05	5,54	4,17	2,36	1,85

COOLING

CAPACITY kW

EER

+35°C UE / 27/19°C UI	Max	11,5	3,36
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HEATING

CAPACITY kW

COP

+12/11°C UE / +20°C UI	Max	13,2	3,45
+7/6°C UE / +20°C UI	Max	12,5	3,07
+2/1°C UE / +20°C UI	Max	9,4	2,64
-7/-8°C UE / +20°C UI	Max	8,3	2,36
-10/-11°C UE / +20°C UI	Max	7,5	2,40

UNI 11300-4 - Full load maximum power

AIR / WATER GR9FI110EMX+HKDE

EN14511

COOLING +35°C		Max	Nom
Capacity @ 18/23°C	kW	10,3	8,75
EER @ 18/23°C		3,39	3,62
Capacity @ 7/12°C	kW	7,1	6,2
EER @ 7/12°C		2,19	2,22

ERP Ecodesign - EN14825

LOW - 35°C Average -10°C	Pdesignh	kW	9	A ⁺⁺
	η	%	163	
MEDIUM - 55°C Average -10°C	Pdesignh	kW	7	A ⁺
	η	%	112	

ERP Ecodesign - EN14825 - Part Load

	35°C					55°C				
	12°C	7°C	2°C	-7°C	TOL	12°C	7°C	2°C	-7°C	TOL
kW	3,16	3,27	4,70	7,84	5,07	3,06	3,29	3,60	5,85	4,45
COP	7,38	6,25	4,03	2,31	1,40	5,82	4,26	2,78	1,66	1,25

UNI 11300-4 (35°C) - Full load maximum power

	12°C	7°C	2°C	-7°C
kW	12,35	11,70	8,16	7,84
COP	4,30	4,01	2,59	2,31

EN14511

	7°C	-7°C
kW	10,73	6,30
COP	4,10	2,70

DHW/Combi ERP
See Emix

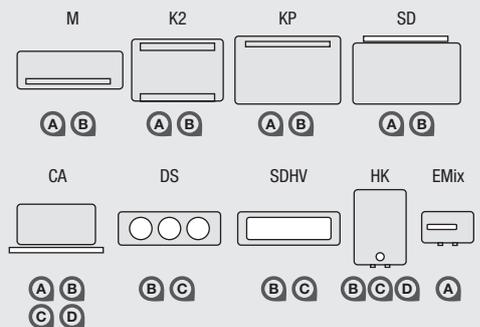
MATCHINGS

- A + A + A + A
- A + A + A + B
- A + A + B + B
- A + B + B + B
- A + A + A
- A + A + B
- A + B + B
- B + B + B
- B + B
- A + C
- A + B
- B + C
- C
- D

● Ideal matching with Emix/Emix Tank

Power supply	V/Ph/Hz	230/1/50-60 - 400/N3/50
Power Input (max.)	W/A	4400/20 - 5200/10x3
R410A standard refrigerant charge	kg	3.38
Compressor Type		Twin Rotary
Fan speed		Auto
Sound pressure (max.)	dB(A)	48

Liquid Pipe	mm(inch)	6,35 (1/4")
Gas Pipe	mm(inch)	9,52 (3/8") / 12,77 (1/2")
Total length of pipes (standard load)	m	Multi 40 / Mono 30
Total length of pipes (additional load)	m	Multi 65 / Mono 50
Pipe length per unit (standard load)	m	30
Pipe length per unit (additional load)	m	30
Maximum height difference (total)	m	10
Maximum height difference (between indoor units)	m	5





eco
friendly

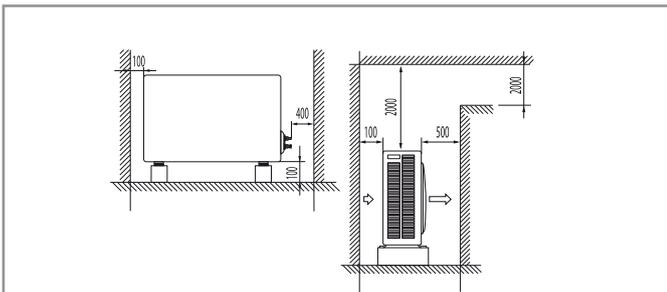
GR9F140 PENTA EMX three phases

5 CONNECTIONS + DHW

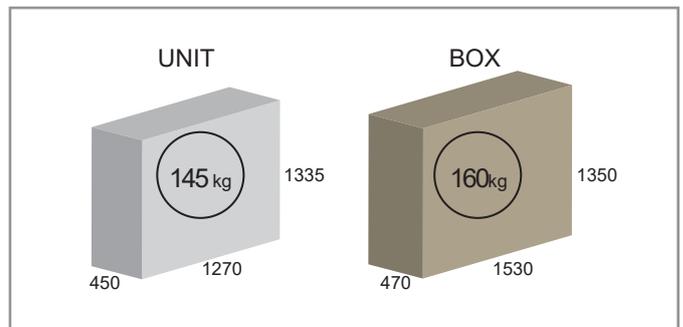
Five connections plus Emix and 16kW of capacity for public spaces, restaurant, offices, bar, house, big apartments and always ready to produce dhw in heat recovery, that means free during the cooling mode.

G140penta was thoughted for multiplit systems in big spaces or up to 8 room, when matched with SDHV indoor units it's possible to air conditioning also bathrooms and kitchens, while the match with the HK hydronic module transform G140penta in a split inverter water heat pump for underfloor or radiators systems, also in mixed configuration with direct expansion units. It can be also a minichiller with fan coils for commercial applications.

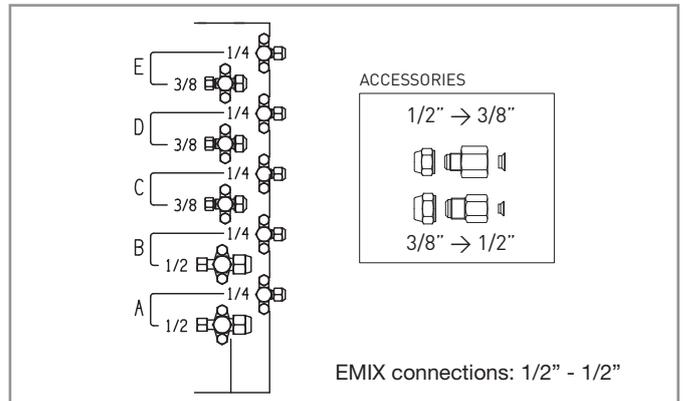
MINIMUM OPERATION AREA (mm)



DIMENSIONS (mm)



GAS CONNECTIONS



EXTENDED RANGE

-32°C | +50°C

UPDATE

FLASH MEMORY

CONNECTION

WEB CONTROL

AIR / AIR

ERP Ecodesign - EN14825

COOLING +35°C	Pdesignc	kW	13,6	A
	SEER		5,11	
HEATING Average -10°C	Pdesignh	kW	11,5	A+
	SCOP		4,13	

ERP Ecodesign - EN14825 - Part Load

	35°C	30°C	25°C	20°C	12°C	7°C	2°C	-7°C	TOL
kW - kW	13,65	10,05	6,60	3,44	2,82	4,08	6,17	10,10	6,65
EER - COP	2,60	3,71	6,01	8,57	5,43	5,04	4,25	2,76	1,78

COOLING

CAPACITY kW

EER

+35°C UE / 27/19°C UI	Max	13,7	2,60
-----------------------	-----	------	------

HEATING

CAPACITY kW

COP

+12/11°C UE / +20°C UI	Max	16,3	3,51
+7/6°C UE / +20°C UI	Max	15,5	3,10
+2/1°C UE / +20°C UI	Max	10,9	2,46
-7/-8°C UE / +20°C UI	Max	10,1	2,76
-10/-11°C UE / +20°C UI	Max	8,2	2,29

UNI 11300-4 - Full load maximum power

AIR / WATER GR9FI140EMX+HKEE

EN14511

COOLING +35°C

		Max	Nom
Capacity @ 18/23°C	kW	13,3	9,9
EER @ 18/23°C		2,70	3,61
Capacity @ 7/12°C	kW	9,0	7,5
EER @ 7/12°C		2,15	2,52

ERP Ecodesign - EN14825

LOW - 35°C Average -10°C	Pdesignh	kW	10,9	A++
	η	%	158	
MEDIUM - 55°C Average -10°C	Pdesignh	kW	8,5	A+
	η	%	110	

ERP Ecodesign - EN14825 - Part Load

	35°C					55°C				
	12°C	7°C	2°C	-7°C	TOL	12°C	7°C	2°C	-7°C	TOL
kW	3,81	3,92	5,66	9,43	6,10	3,65	3,99	4,33	7,05	5,35
COP	7,1	6,00	3,79	2,21	1,26	5,61	4,15	2,64	1,54	1,21

UNI 11300-4 (35°C) - Full load maximum power

	12°C	7°C	2°C	-7°C	EN14511	
					7°C	-7°C
kW	15,24	14,51	9,92	9,43	12,50	8,00
COP	4,12	3,66	2,85	2,21	4,11	2,72

DHW/Combi ERP
See Emix

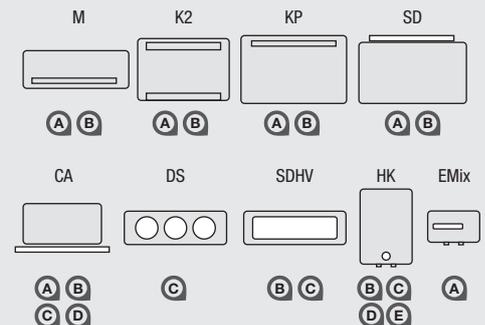
Dati preliminari alla data di stampa del catalogo

MATCHINGS

- A + A + A + A + A
- A + A + A + B + B
- A + A + A + A
- A + A + A + B
- A + A + A + C
- A + A + B + B
- A + B + B + B
- A + A + A
- A + A + B
- A + A + C
- A + B + B
- A + B + C
- B + B + B
- B + B
- A + C
- B + C
- A+D
- D
- E

● Ideal matching with Emix/Emix Tank

Power supply	V/Ph/Hz	400/N3/50
Power Input (max.)	W/A	5200/10x3
R410A standard refrigerant charge	kg	4,4
Compressor Type		Twin Rotary
Fan speed		Auto
Sound pressure (max.)	dB(A)	50
Liquid Pipe	mm(inch")	6,35 (1/4")
Gas Pipe	mm(inch")	9,52 (3/8") / 12,77 (1/2")
Total length of pipes (standard load)	m	40
Total length of pipes (additional load)	m	Multi 100 / Mono 50
Pipe length per unit (standard load)	m	30
Pipe length per unit (additional load)	m	30
Maximum height difference (total)	m	10
Maximum height difference (between indoor units)	m	5



F A Q

FREQUENTLY ASKED QUESTION



What is iSeries?

iSeries is a full DC inverter heat pump used for Summer air conditioning, Winter heating and domestic hot water service. It can be installed both in residential (flats, villas, etc...) and in commercial (offices, shops, etc...) applications. It is completely made in Italy.

iSeries is really Made in Italy?

iSeries is totally designed and built in Italy, inside Argoclima factory placed in Gallarate. Argoclima is a 80 years old Company with a solid experience in heating and air conditioning business.

Where can I use iSeries?

You can use iSeries everywhere as heating&cooling system: small and medium flats, lofts, houses but also offices, shops, restaurants, hotels... Thanks to its great flexibility it fits every type of building.

iSeries is also an air conditioner?

Sure it is! iSeries is an advanced air conditioner with all the most modern features (individual temperature control, remote controls via GSM/WiFi, etc...) and with the highest energy efficiency classes available. With an eMix unit you can also have hot water!

I heard about heat pumps. How do they work? iSeries is an heat pump

Heat pump is a technology that uses air renewable energy for heating. We can say that it's something like a refrigerator used in the opposite way... It warms indoor rooms instead of cool down food. iSeries is an heat pump that can provide indoor heating with split units (air to air) or with underfloor systems (air to water). Besides this, thanks to eMix units, iSeries uses heat pump technology also for domestic hot water service.

I would like to install an heat pump but where it is very cold.

iSeries can operate with a very wide outdoor temperature range, down to -32° C in heating mode.

My house is air conditioning ready. Can I use an iSeries system?

Yes you can use it. Please check your equipment is suitable for R410A air conditioning systems.

Why I can't find neither BTU/h capacity of the indoor units nor the mono multi-split range of the outdoor units?

The classic concept of fixed rated capacity for indoor units is now overcome by iSeries. All indoor units are classified with just 5 sizes (A, B, C, D and E), each of them it's able to operate inside a capacity range from a minimum to a maximum value (i.e. size A up to 4 kW). Best results in comfort and efficiency. Moreover, all outdoor units (starting from GR9FIG42EMX) can be installed both in mono and multisplit configuration.

I can't find the sheets with the nominal capacity of every matching...

With iSeries you simply don't need them. Choosing an iSeries system is very easy: you can select the outdoor model according to the required capacity, the set of indoor units and verify the selection with the matching tables (check outdoor sheets). Easy, isn't it? iSeries control system will take care of all the rest: only if it's very cold or hot outside, the system will provide maximum power, otherwise it will reduce power input offering money and energy saving all year long.

I'd like to use underfloor heating in winter and split air conditioning in the summer... I have no space for two systems! What can I do?

Easy way: you can install a single mixed iSeries with Hydrokit and direct expansion indoor units, split type for example. In a system like this, you can use underfloor heating (connected with Hydrokit) during Winter and split units in Summer. You can also add an eMix for hot water service. 3 services, 1 system!

I'd like to have a ducted system for my whole house. What I choose?

In this case the best option is a SDHV system. With this type of ducted system it is possible to distribute air in all rooms, kitchen and bathroom included. Visual impact is very low: air distribution terminals are very small and similar to LED lights.

Hot water for free? How it's possible?

No mystery: when the system is operating in cooling mode (during Summer or whenever it's necessary) eMix or eMix Tank units will recover the energy without waste it. Thanks to this feature, it's possible to heat the water without increase electric energy consumption. The energy consumption you can see on the electric meter, is just for indoor rooms air conditioning!

I understand that eMix & eMix Tank units are used to produce hot water. But how do they work?

eMix and eMix Tank are two similar answers to the same need: hot water for domestic use. These two units are designed to keep hot water inside the tank. The tank is provided inside the same cabinet for eMix Tank, but it has to be provided separately with eMix (choosing among the models available on the market). eMix and eMix Tank use refrigerant gas to heat the water; besides this, thanks to heat recovery technology, water heating service is free of charge during cooling mode.

How many liters of water eMix can warm up?

There is no fixed value. Normally 50 liters for each person are required daily. Generally speaking, it's better to have at least a 100 liters water tank for eMix applications. eMix Tank is available with 220 and 300 liters tank.

How far can I connect indoor units?

Distance limits are related to outdoor unit model and to configuration (monsplit, dualsplit, etc...). Please always check distance table on this catalogue.

Can I install iSeries in a shop or office?

iSeries is designed to satisfy air conditioning and heating requests in every type of building, also in commercial and service sector, such as shops, bars, restaurants and open spaces.

They offered me a "Package" air conditioner. What it means?

Package is the reference normally used for air conditioners used in commercial applications or public spaces. iSeries range is really the same and you can use outdoor and indoor units also for this type of installations. You can simply choose the right size of units such as size C or D cassettes or ducted units or, again, SDHV units.

What type of system can I do with an Hydrokit unit

There are 3 different options: underfloor systems, fancoil and low temperature radiators (steel or aluminum). In particular, underfloor distribution can be very simple (single zone) or more complicated (multi zone) following the application desired.

iSeries is an innovative and quality product. Which benefits it gives to me?

There are a lot of benefits with iSeries: mixed systems combining direct expansion and hydronic which can be used as you prefer; energy and money saving thanks to free water heating during cooling mode; an available range with few codes but with a lot of applications provided; pre and after sales support available for you.

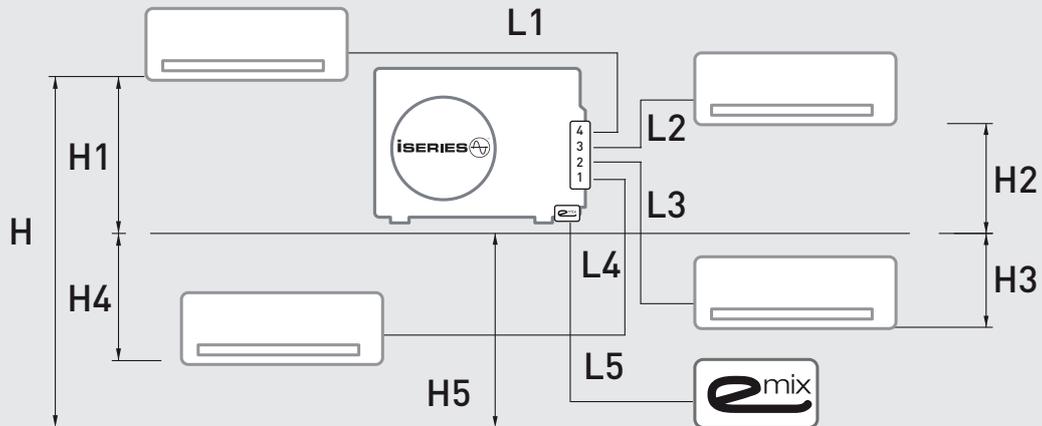
Does iSeries make me save on the electric bill?

Yes it does! How? First of all because iSeries uses heat pump technology that extracts energy from the air. This benefit, with iSeries, is increased thanks to the high energy efficiency classes (over A class) and to the unique feature of free domestic water heating during cooling mode. You can also use iSeries with other electric domestic appliances and avoid gas bill. iSeries means Made in Italy saving!

With all these innovative features how much is an iSeries system

iSeries is a high quality product made. If you compare an iSeries system that can be used throughout the year with a traditional heating system + multisplit, you'll find out that with iSeries you can save on both products purchasing and most of all on management costs allowing you, for example, to have hot water for free during summer time.

ISERIES™ OUTDOOR/INDOOR REFRIGERANT LIMITS



Choose the configuration according to the number of indoor units and the outdoor unit model.
 Check that the total length of piping (including eMix piping) does not exceed the maximum distances listed in the table.
 Additional refrigerant charge for eMix line (if needed) is: 20 g/m

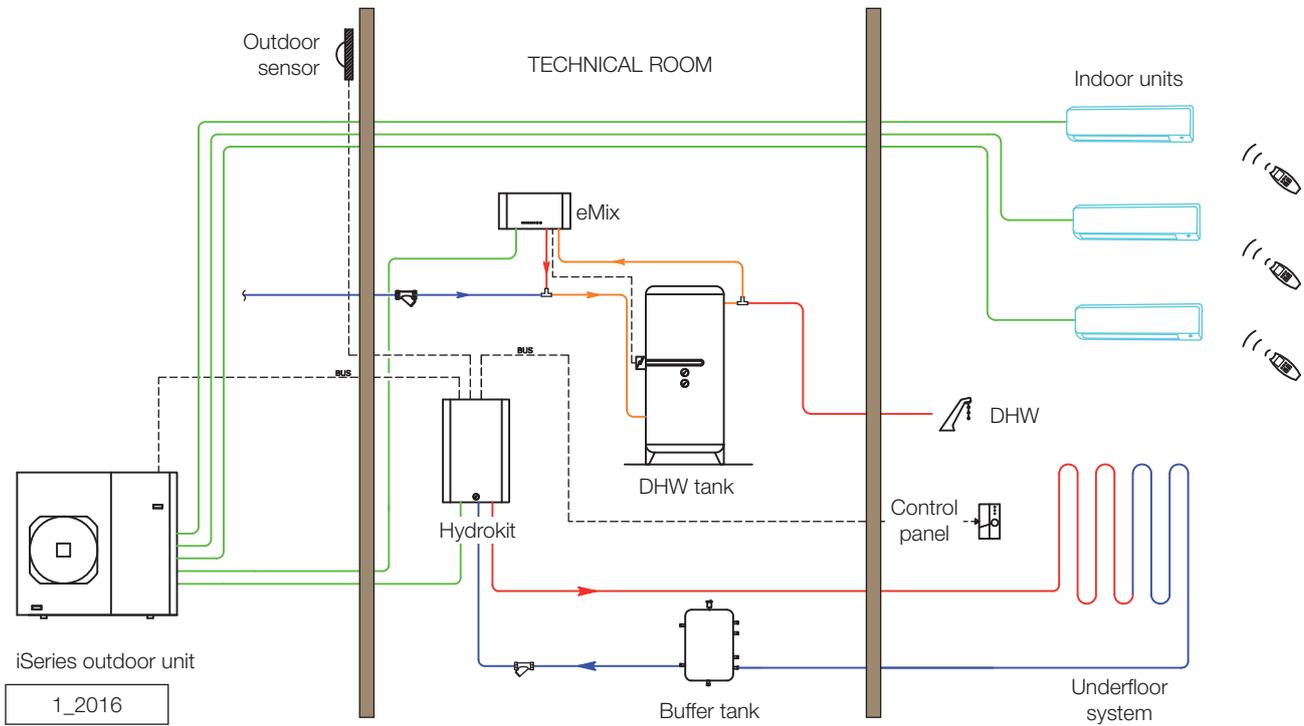
		STANDARD LOAD		ADDITIONAL LOAD	
		L Tot (m)	L n (m)	L Tot (m)	L n (m)
GR9FI30	Mono	7,5	-	15	-
	Dual	15	12	30	25
GR9FI42	Mono	7,5	-	20	-
	Dual	15	12	30	25
GR9FI50	Mono	7,5	-	20	-
	Dual	15	12	30	25
GR9FI65	Mono	20	-	35	-
	Dual	30	25	45	30
	Trial	30	20	45	25
GR9FI80	Mono	30	-	50	-
	Dual	40	30	65	30
	Trial	40	30	65	30
	Quadri	40	30	65	30
GR9FI110	Mono	30	-	50	-
	Dual	40	30	65	30
	Trial	40	30	65	30
	Quadri	40	30	65	30
GR9FI140P	Mono	40	-	50	-
	Dual	40	30	100	30
	Trial	40	30	100	30
	Quadri	40	30	100	30
	Penta	40	30	100	30

L Tot = Total length of pipes, given by the sum of pipe lengths for each indoor unit (L1+L2+L3...)

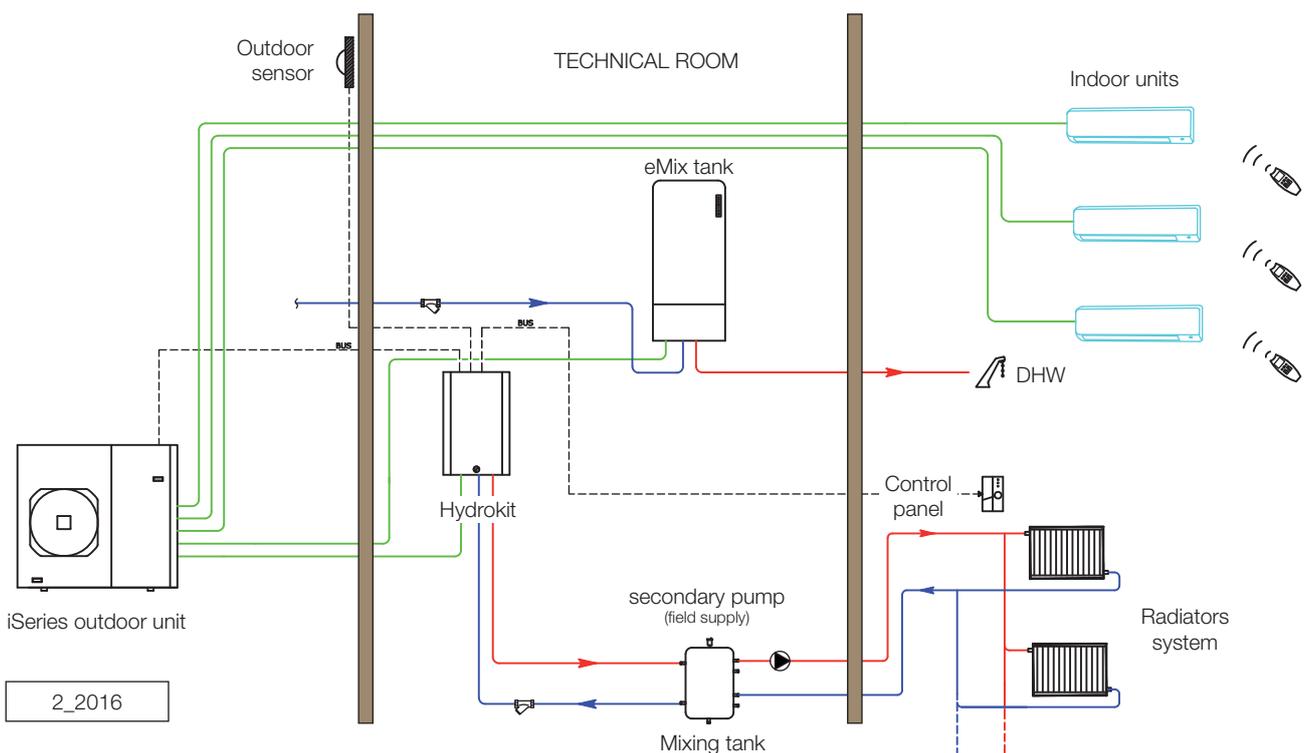
L n = Maximum pipe length per single indoor unit (n = 1, 2, 3...)

QUANTITY OF ADDITIONAL REFRIGERANT per tubazioni 1/4" - 3/8" = 15 g/m per tubazioni 1/4" - 1/2" = 20 g/m
MAXIMUM HEIGHT DIFFERENCE OUTDOOR UNIT/INDOOR UNIT: 10 m - H1, H2, H3, H4, H5
MAXIMUM HEIGHT DIFFERENCE BETWEEN INDOOR UNITS: 5 m - H

MIXED APPLICATION WITH DHW; UNDERFLOOR SYSTEM

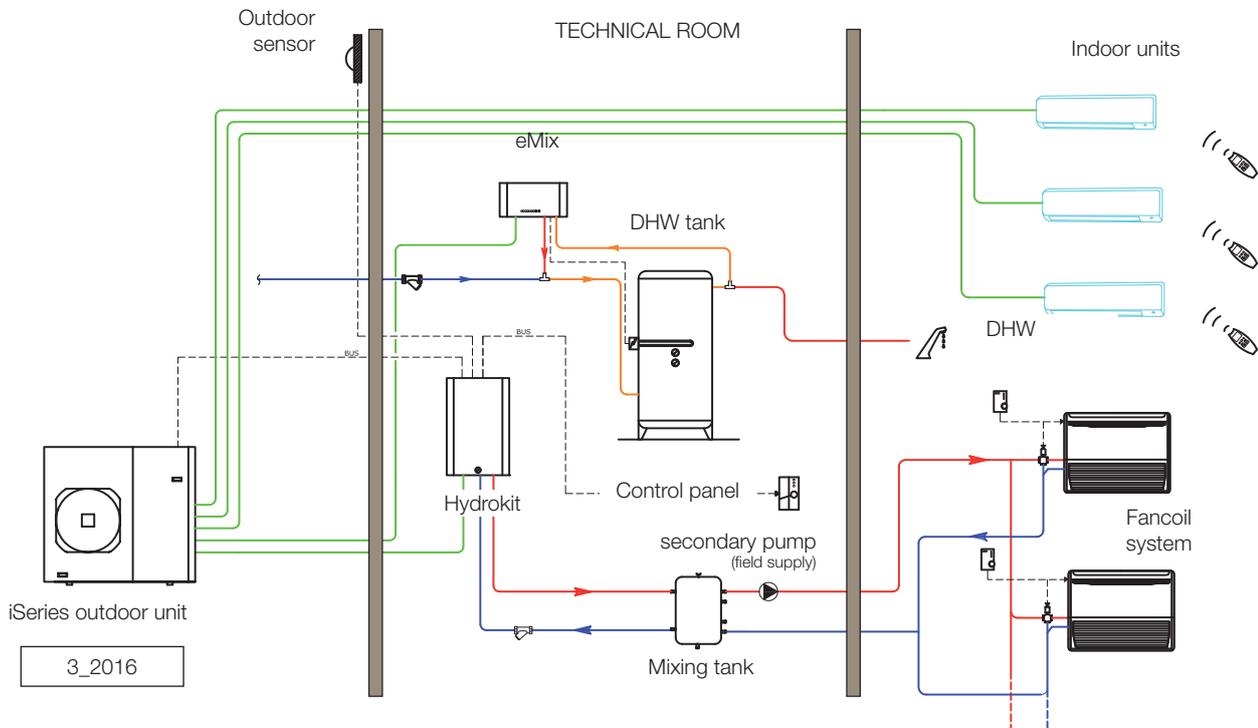


MIXED APPLICATION WITH DHW; RADIATORS SYSTEM

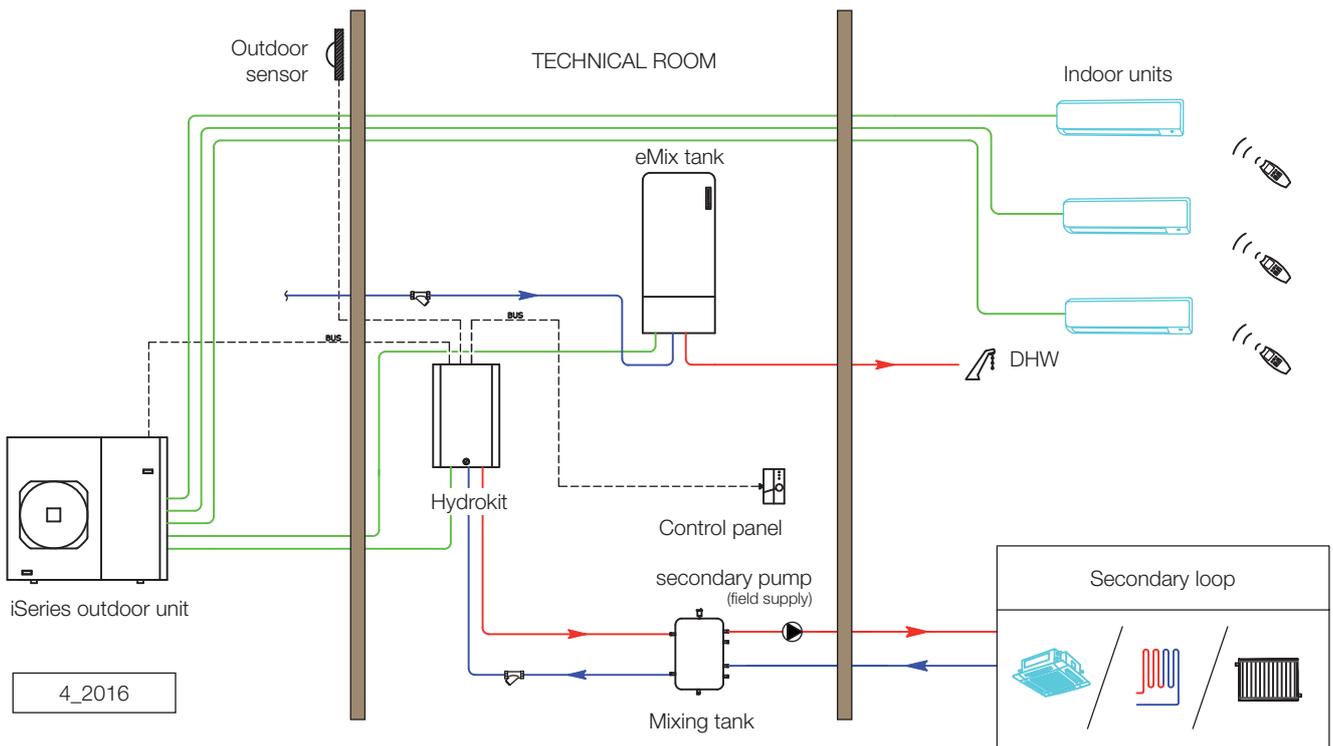


*sample layout, please check datasheets of every unit during pre-sales.

MIXED APPLICATION WITH DHW; FANCOIL SYSTEM

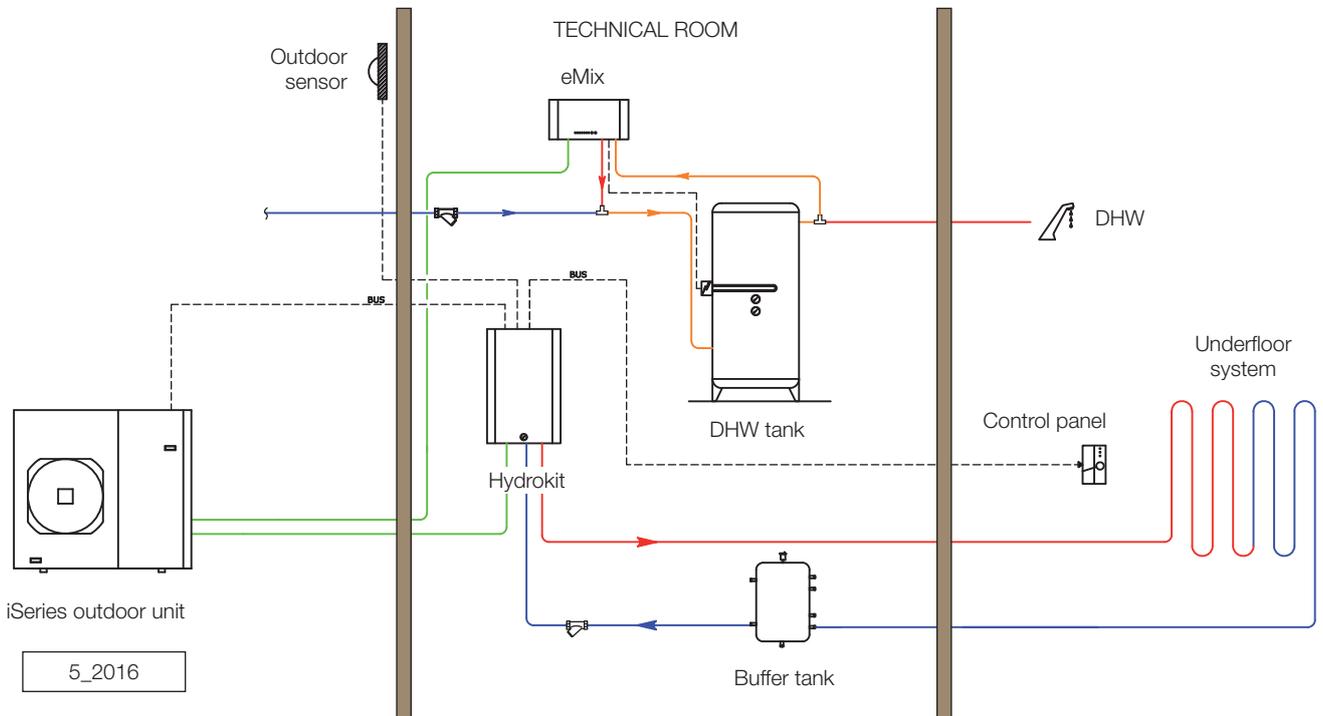


MIXED APPLICATION WITH DHW; PRIMARY-SECONDARY LOOP

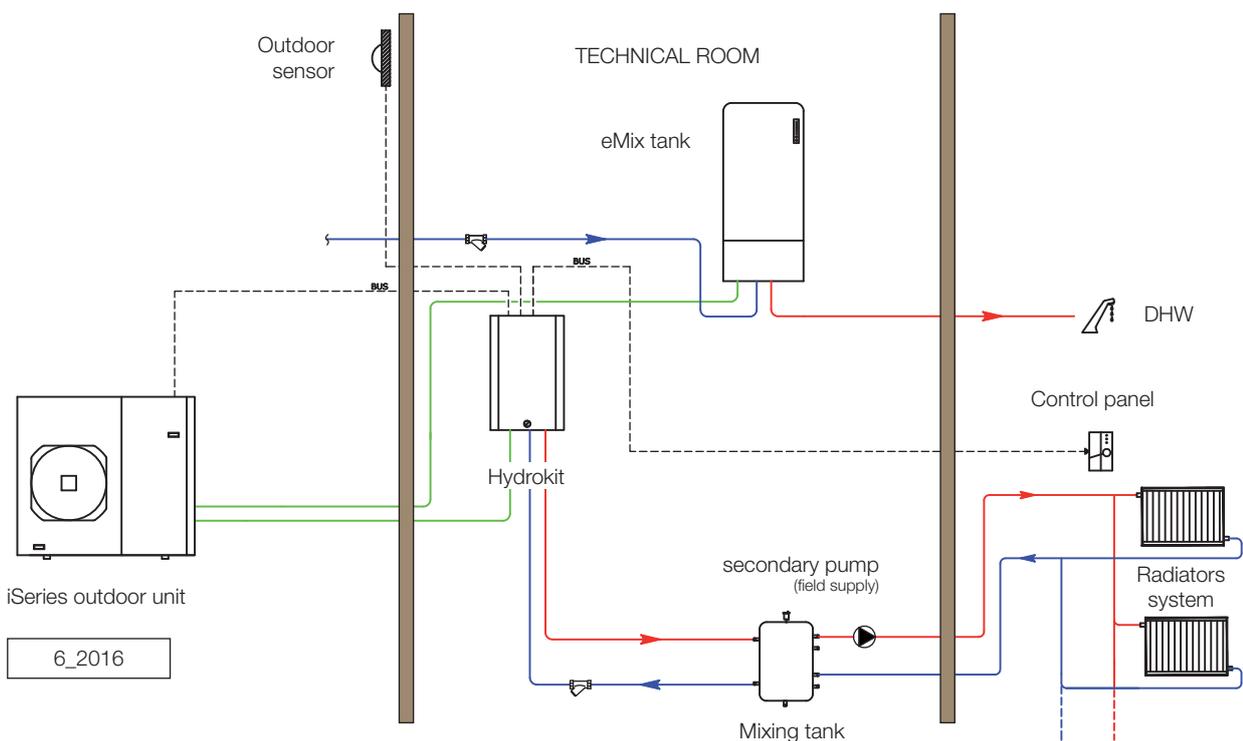


*sample layout, please check datasheets of every unit during pre-sales.

APPLICATION UNDERFLOOR SYSTEM + DHW

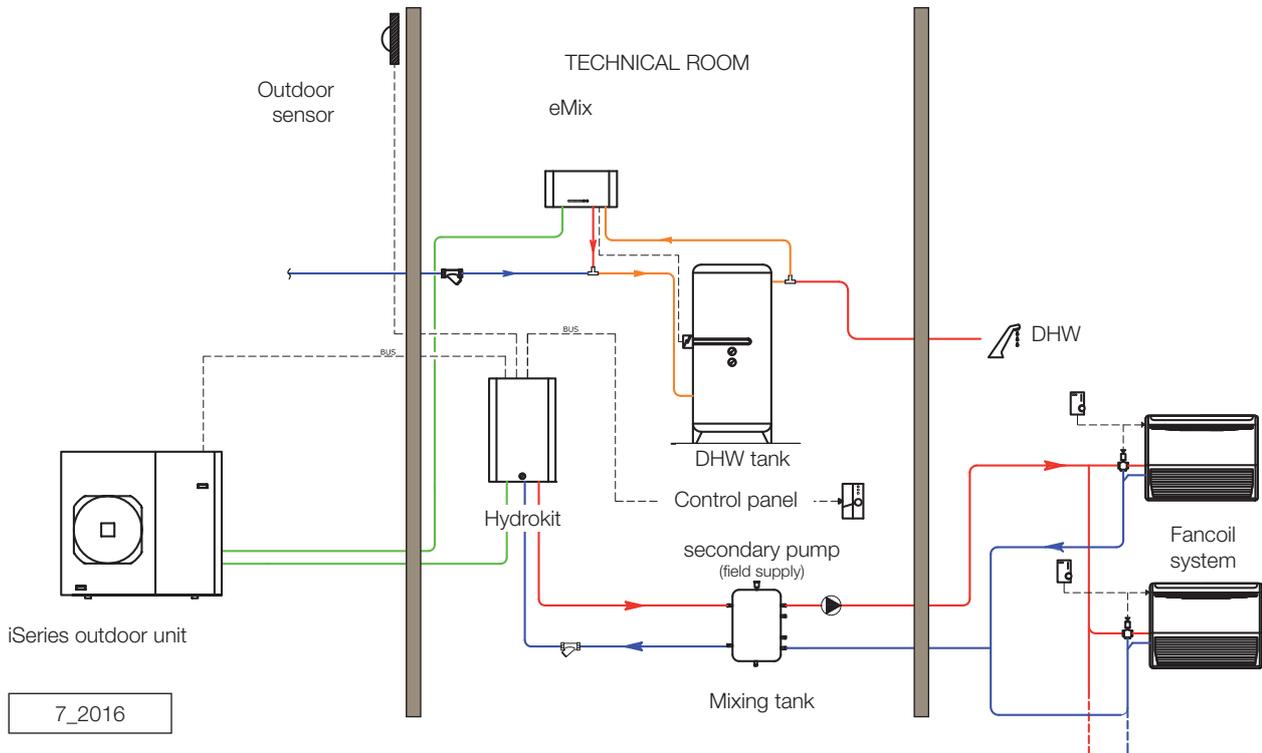


APPLICATION RADIATORS SYSTEM + DHW

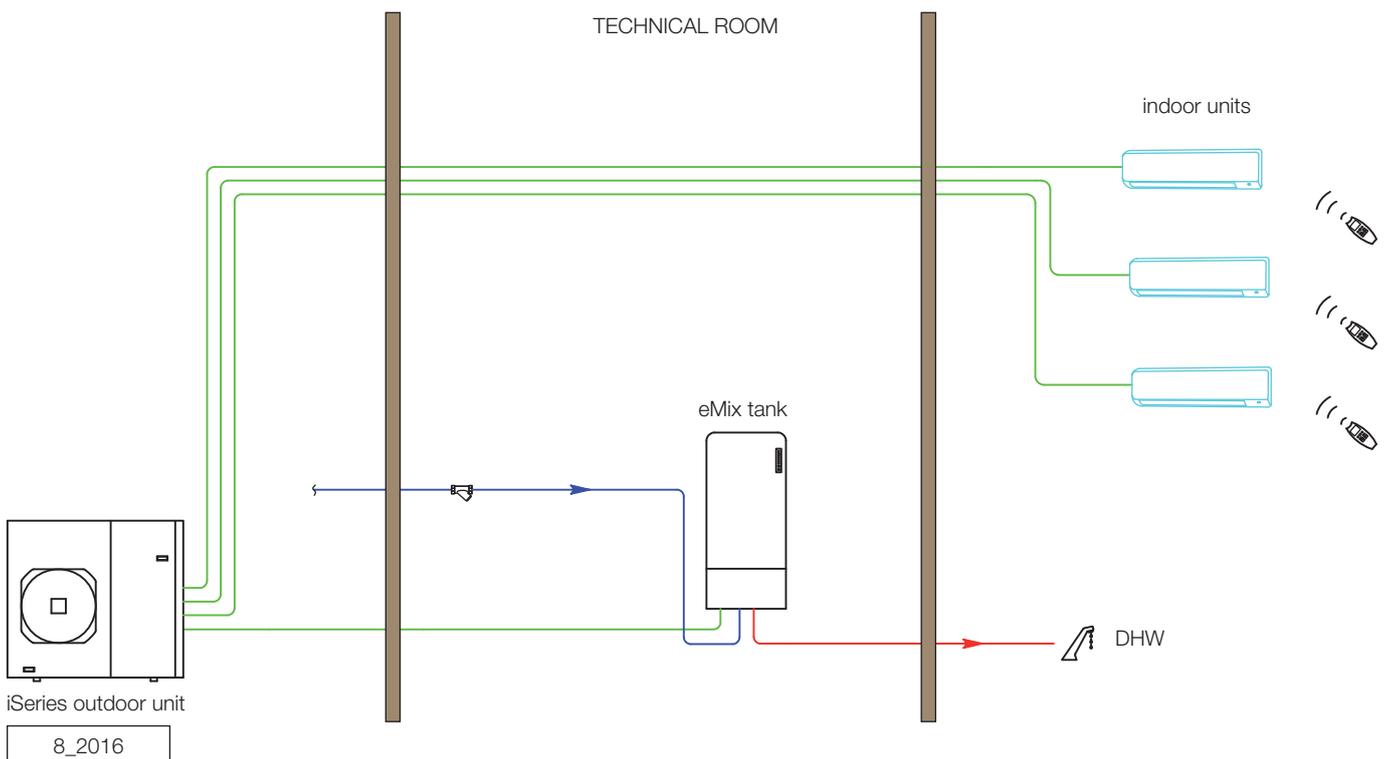


*sample layout, please check datasheets of every unit during pre-sales.

APPLICATION FANCOIL SYSTEM + DHW

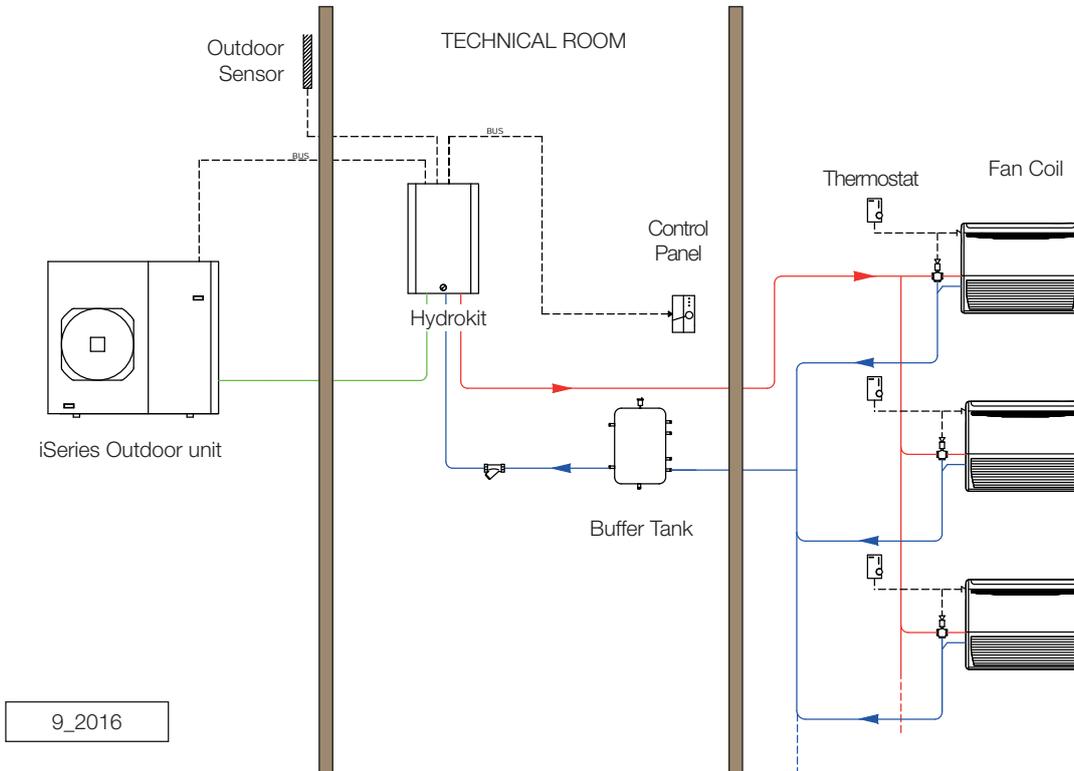


APPLICATION DIRECT EXPANSION INDOOR UNITS + DHW

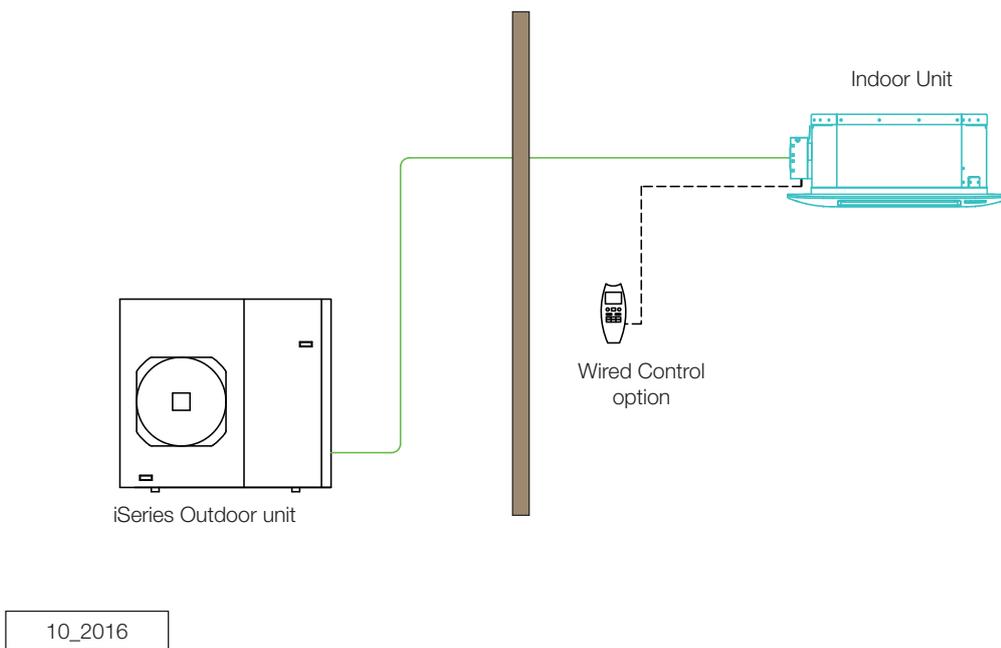


*sample layout, please check datasheets of every unit during pre-sales.

APPLICATION HYDRONIC WITH FAN COIL

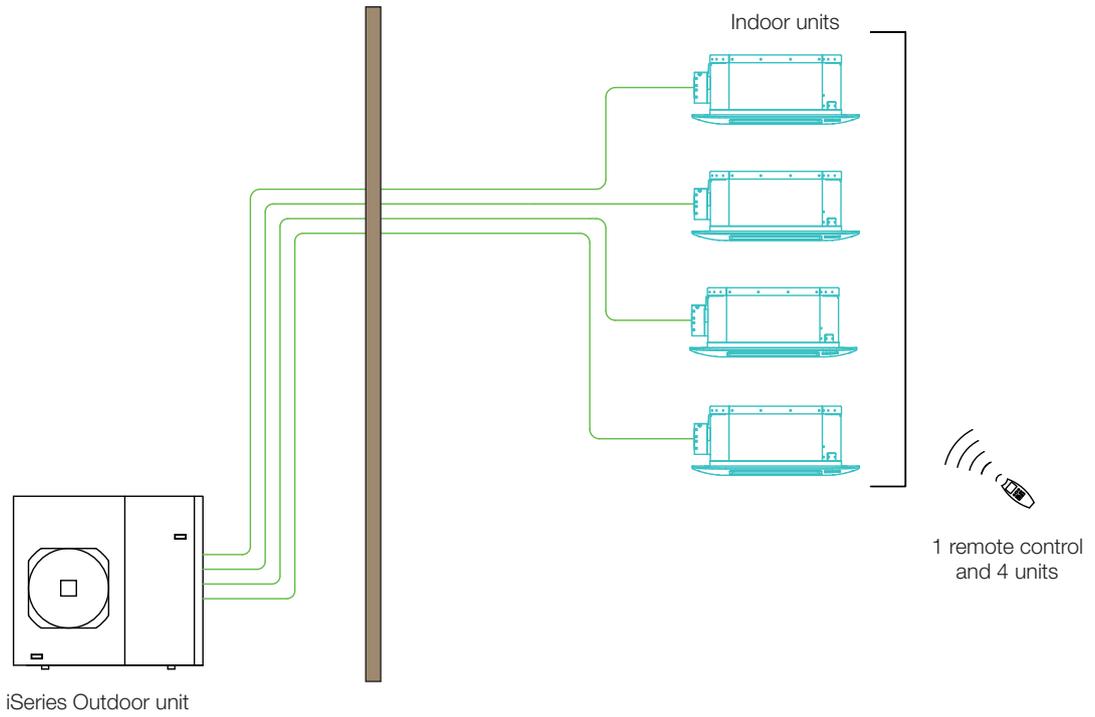


APPLICATION PACKAGE



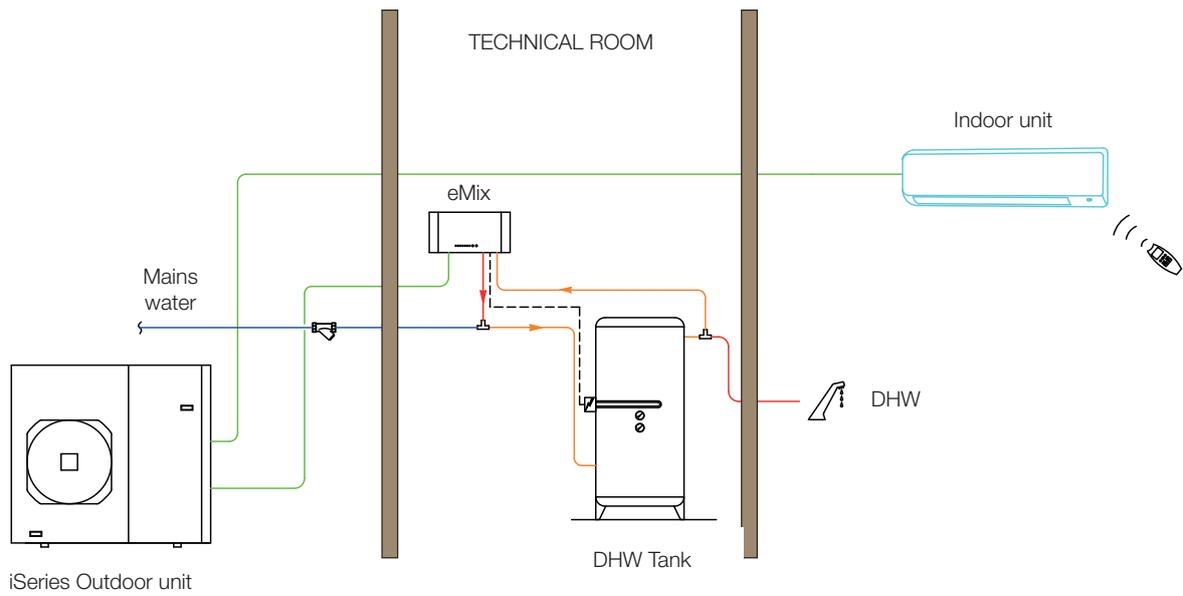
*sample layout, please check datasheets of every unit during pre-sales.

APPLICATION PACKAGE OPEN SPACE



11_2016

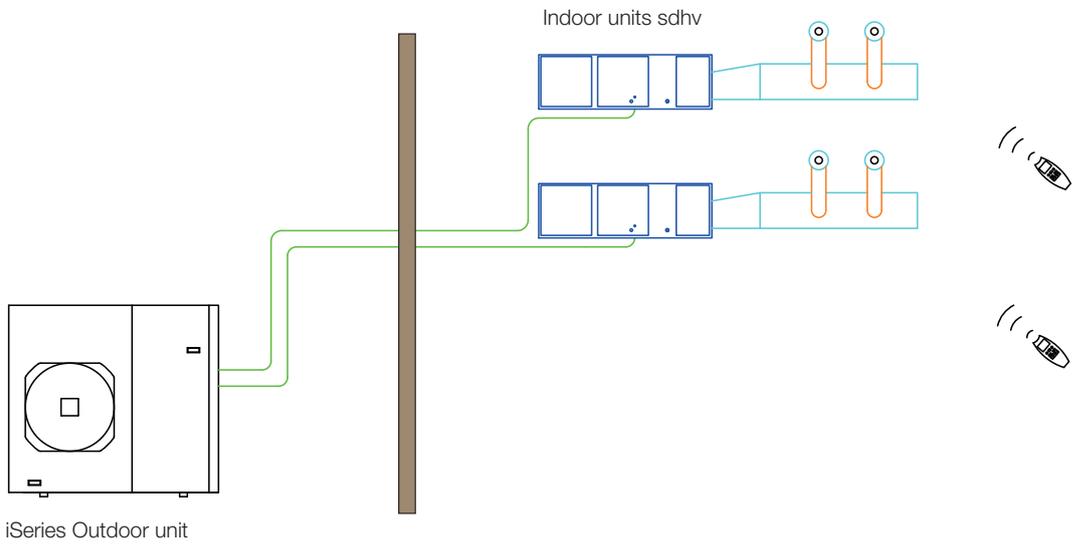
APPLICATION MONOSPLIT WITH DHW



12_2016

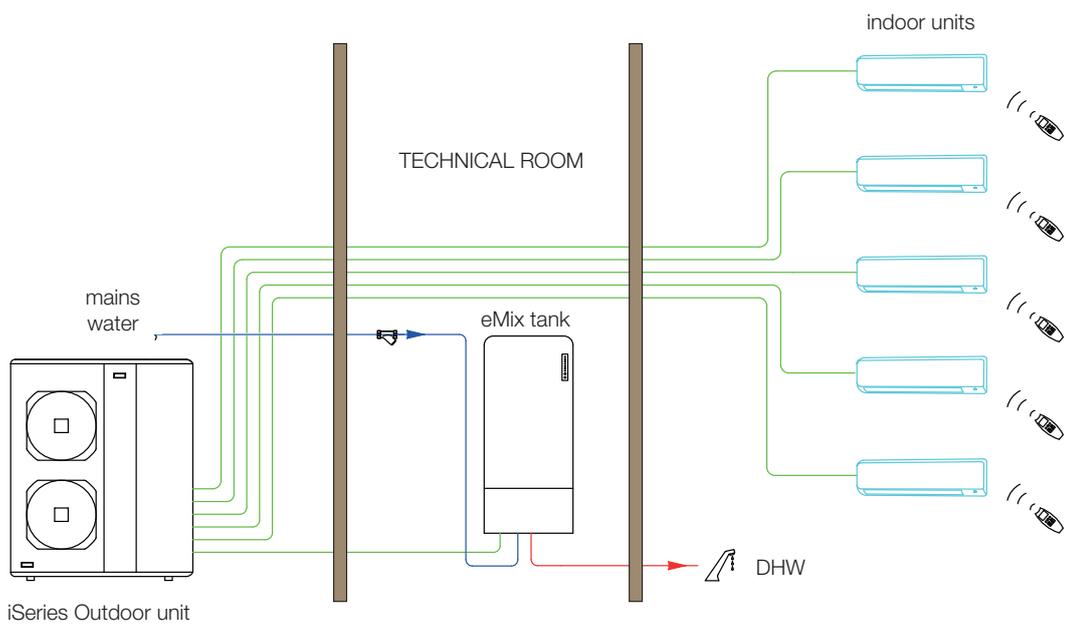
*sample layout, please check datasheets of every unit during pre-sales.

APPLICATION MULTISPLIT SDHV



13_2016

APPLICATION DIRECT EXPANSION iSERIES PENTA + DHW



14_2016

*sample layout, please check datasheets of every unit during pre-sales.



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